



CONSTRUCTION CHEMICALS PRODUCTS CATALOGUE

Concrete Additives ●

Special Concrete Additives and Complementary Products ●

Cement Additives ●

Construction Chemicals ●

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Yapichem Kimya Sanayi A.Ş. was founded in 2011 by a team of professionals with vast experiences in the construction chemicals business. Today, with production facilities throughout Turkey, and an extensive partner network around the globe, **Yapichem** is internationally recognized as an expert in providing high quality specialty chemicals to Concrete, Cement and Construction Industries.

By our state-of-the-art laboratories and R&D facilities, we are able to cater to our customers' specific needs by producing tailor-made, high performance products for each customer and project. Our technology and innovation-based approach combined with our customer-centric culture enables us to dedicate ourselves to continuous, solution-oriented and exceptional customer experience.

At **Yapichem**, we are passionate about innovation, customer satisfaction and building lasting relationships with utmost care and respect to the community, employees, suppliers and environment.

Production

Our 300.000 MT annual production capacity of İstanbul, İzmir and Gaziantep factories strategically positioned near transportation hubs and wide logistical network enables us to provide fast product delivery across the globe.



Technology

Our expert engineering team develop innovative, high performance, and high-quality products tailor-made to customers' specific needs at our state-of-the-art R.&D, Concrete and Cement laboratories.

Concrete Lab | Cement Lab | R&D Lab



Products Tailor Made
To Customer Needs



Investment in
Continuous R&D



Extensive Concrete
Trial Experience and
Data



The Advantage Of
Semi-Product
Formulation Know-How



Product Groups

Yapichem Chemical's products are divided into 4 main product groups according to their usage areas and sold under 5 registered brands.

Concrete Additives



- Plasticizer Concrete Admixtures



- Midrange Plasticizer Concrete Admixtures
- Superplasticizer Concrete Admixtures



- New Generation Superplasticizer High Performance Concrete Admixtures

Special Concrete Additives and Complementary Products



- Set Accelerating Admixtures
- Set Retarder Admixtures
- Air-entraining Admixtures
- Antifreeze Concrete Admixtures

- Re-dosing Admixtures
- Zero Slump Concrete Admixtures
- Early Strength Increasing Additives
- Surface Retarding Admixtures
- Waterproofing Admixtures
- Curing Compounds
- Shotcrete Admixtures

- Alkali-Silica Reaction Controlling Admixtures
- Corrosion Inhibiting Admixtures
- Pumping Aids
- Underwater Concrete Admixtures
- Concrete Remover Chemicals
- Mould Releasing Agents

Cement Additives



- Strength and Capacity Increasing Cement Additives
- Grinding Aid Cement Additives
- Pack Set Inhibitors
- Chrome (VI) Reducing Cement Additives

Construction Chemicals



- Waterproofing Systems
- Repair & Reinforcement
- Flooring Systems
- Mold Release Agents & Mortar Additives
- Tile Adhesives & Grouts
- Thermal Insulation Systems

ARSTEP



Arstep Series admixtures are water reducing plasticizers increasing the strength of concrete by reducing water / cement ratio used in ready mixed concrete production. There are slump retaining and set-retarding summer versions and set-accelerating winter versions.

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ARSTEP EXTRA



Arstep Extra Series admixtures are high range water reducing / midrange and superplasticizers increasing the strength of concrete by reducing water / cement ratio highly used in ready mixed concrete and precast concrete production and large scale construction projects. There are slump retaining and set-retarding summer versions and set-accelerating winter versions that allow early formwork removal.

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Superplasticizer Concrete Admixtures

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DEGASET



Degaset Series admixtures are New Generation Superplasticizers.

These are high range water reducing new generation superplasticizers; increasing the early and final strength of high performance concrete by reducing water / cement ratio in ready mixed concrete and precast concrete production. There are slump retaining and set-retarding summer versions and set-accelerating winter versions that allow early formwork removal.

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ARSET



Arset Series products are Special Concrete Admixtures and Complementary Products. These concrete admixtures and complementary products are used for special purposes in ready mixed concrete, precast concrete production and large scale construction projects.

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ARCEM



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Construction Chemicals

YAPIFINE



Eco-friendly, high performance products used in construction to increase the durability and longevity of structures.

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External thermal insulation systems designed for increasing energy efficiency and thermal comfort of structures.

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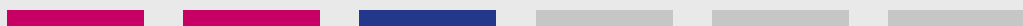
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CONCRETE



AD

ADDITIVES

ARSTEP Series admixtures are water reducing plasticizers increasing the strength of concrete by reducing water / cement ratio used in ready mixed concrete production. There are slump retaining and set-retarding summer versions and set-accelerating winter versions.

ARSTEP



● Plasticizer Concrete Admixtures



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		PRODUCTS	ARSTEP 10 SERIES	ARSTEP 20 SERIES	ARSTEP 30 SERIES	ARSTEP 40 SERIES	ARSTEP 50 SERIES
USAGE AREAS	Ready-mixed Concrete Production	■	■	■	■	■	■
	Precast Concrete Production						
	Self Leveling Concrete Production						
	Shotcrete Production						
	Zero-slump Concrete Production						
	Aggregate Looking Concrete (Wash Concrete) Production						
	Pouring Concrete in Hot Weather	■	■	■	■	■	■
	Pouring Concrete in Cold Weather	■	■	■	■	■	■
PURPOSE OF USAGE	Slump Retarding	■	■	■	■	■	■
	Set Acceleration ^[1]	■	■	■	■	■	■
	Set Retarder ^[2]	■	■	■	■	■	■
	Early High Strength	■	■	■	■	■	■
	Final High Strength	■	■	■	■	■	■
	Waterproofing						
	Increasing The Hydration Temperature of Concrete and Preventing Freezing						
	Air-entraining						
	Set Retarder in Concrete Surface						
	Re-dosing The Consistency of Concrete						
	Accelerate Hardening						
	Alkali-Silica Reaction (ASR)						
	Corrosion Inhibitor						
	Pumping Aid						

1- Winter versions (W)

2- Summer versions (S)

ARSTEP 10 Series

Water Reducing / Plasticizer Concrete Admixtures

Product Description

ARSTEP 10 SERIES products are naphthalene sulfonate / lignosulfonate based water reducing plasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio. Summer (**S**) type products have the feature of delaying setting (consistency protection) in hot weather. Winter (**W**) type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form (**CONS**).

TECHNICAL PROPERTIES	
Chemical Base	Naphthalene sulfonate / Lignosulfonate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10,0 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS	
Arstep 10	EN 934-2 Table 2 ASTM C 494 Type A
Arstep 10 S	EN 934-2 Table 10 ASTM C 494 Type D
Arstep 10 W	EN 934-2 Table 2 ASTM C 494 Type E

Advantages

- Increases ultimate strength of concrete.
- Improves workability of the concrete.
- Decreases risk of segregation.
- Extends the casting and placing time of concrete.
- Provides smooth surface finish for concrete in the formwork without any segregation.
- Prevents cold joints during concrete production with long casting time.

Areas of Use

- Ready mixed concrete production (with or without pump)
- Hot weather concreting
- Long distance concrete transportation
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Mass concrete and roller compacted concrete applications

Terms of Use

- **ARSTEP 10 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- In Summer: Arstep 10 S
- In Winter: Arstep 10 W
- At Normal Temperature: Arstep 10

Consumption Dosage

ARSTEP 10 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **ARSTEP 10 SERIES** products should be added into the rest of water and should be mixed properly.

Warning: Concrete mix design and admixture dosage should be determined by laboratory tests according to the concrete class and properties.



Compatibility with Other Admixtures

ARSTEP 10 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Doz Series
- Arset Friz Series
- Arset Fast Series
- Arset Retard Series
- Arset Waterproof Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost.

If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSTEP 10 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- ARSTEP 10 / 10 S / 10 W
- ARSTEP 12 / 12 S / 12 W
- ARSTEP 15 / 15 S / 15 W



ARSTEP 20 Series

Water Reducing / Plasticizer Concrete Admixtures

Product Description

ARSTEP 20 SERIES products are naphthalene sulfonate / lignosulfonate based water reducing plasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio. Summer (**S**) type products have the feature of delaying setting (consistency protection) in hot weather. Winter (**W**) type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form.

ARSTEP 20 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES	
Chemical Base	Naphthalene sulfonate / Lignosulfonate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	< 0,1 [EN 480-10]
Alkaline Content (%)	< 10 [EN 480-12]
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS	
Arstep 20	EN 934-2 Table 2 ASTM C 494 Type A
Arstep 20 S	EN 934-2 Table 10 ASTM C 494 Type D
Arstep 20 W	EN 934-2 Table 2 ASTM C 494 Type E

Advantages

- Increases ultimate strength of concrete.
- Improves workability of the concrete.
- Decreases risk of segregation.
- Extends the casting and placing time of concrete.
- Provides smooth surface finish for concrete in the formwork without any segregation.
- Prevents cold joints during concrete production with long casting time.

Areas of Use

- Ready mixed concrete production (with or without pump)
- Hot weather concreting
- Long distance concrete transportation
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Mass concrete and roller compacted concrete applications

Terms of Use

- **ARSTEP 20 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- In Summer: Arstep 20 S
- In Winter: Arstep 20 W
- At Normal Temperature: Arstep 20

Consumption Dosage

ARSTEP 20 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.



Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **ARSTEP 20 SERIES** products should be added into the rest of water and should be mixed properly.

Warning: Concrete mix design and admixture dosage should be determined by laboratory tests according to the concrete class and properties.

Compatibility with Other Admixtures

ARSTEP 20 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Doz Series
- Arset Friz Series
- Arset Fast Series
- Arset Retard Series
- Arset Waterproof Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSTEP 20 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

■ ARSTEP 20 / 20 S / 20 W

■ ARSTEP 25 / 25 S / 25 W

ARSTEP 30 Series

Water Reducing / Plasticizer Concrete Admixtures

Product Description

ARSTEP 30 SERIES products are naphthalene sulfonate / lignosulfonate based water reducing plasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio. Summer (**S**) type products have the feature of delaying setting (consistency protection) in hot weather. Winter (**W**) type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form (**CONS**).

ARSTEP 30 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES

Chemical Base	Naphthalene sulfonate / Lignosulfonate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	< 0,1 (EN 480-10)
Alkaline Content (%)	< 10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS

Arstep 30	EN 934-2 Table 2 ASTM C 494 Type D
Arstep 30 S	EN 934-2 Table 10 ASTM C 494 Type D
Arstep 30 W	EN 934-2 Table 2 ASTM C 494 Type E

Advantages

- Increases ultimate strength of concrete.
- Improves workability of the concrete.
- Decreases risk of segregation.
- Extends the casting and placing time of concrete.
- Provides smooth surface finish for concrete in the formwork without any segregation.
- Prevents cold joints during concrete production with long casting time.

Areas of Use

- Ready mixed concrete production (with or without pump)
- Hot weather concreting
- Long distance concrete transportation
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Mass concrete and roller compacted concrete applications

Terms of Use

- **ARSTEP 30 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- In Summer: Arstep 30 S
- In Winter: Arstep 30 W
- At Normal Temperature: Arstep 30

Consumption Dosage

ARSTEP 30 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.



Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **ARSTEP 30 SERIES** products should be added into the rest of water and should be mixed properly.

Warning: Concrete mix design and admixture dosage should be determined by laboratory tests according to the concrete class and properties.

Compatibility with Other Admixtures

ARSTEP 30 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Doz Series
- Arset Friz Series
- Arset Fast Series
- Arset Retard Series
- Arset Waterproof Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSTEP 30 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

■ ARSTEP 30 / 30 S / 30 W

■ ARSTEP 32 / 32 S / 32 W / 32 CONS



ARSTEP 40 Series

Water Reducing / Plasticizer Concrete Admixtures

Product Description

ARSTEP 40 SERIES products are naphthalene sulfonate / lignosulfonate based water reducing plasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio. Summer (**S**) type products have the feature of delaying setting (consistency protection) in hot weather. Winter (**W**) type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form (**CONS**).

ARSTEP 40 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES

Chemical Base	Naphthalene sulfonate / Lignosulfonate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	< 0,1 (EN 480-10)
Alkaline Content (%)	< 10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS

Arstep 40	EN 934-2 Table 2 ASTM C 494 Type A
Arstep 40 S	EN 934-2 Table 10 ASTM C 494 Type D
Arstep 40 W	EN 934-2 Table 2 ASTM C 494 Type E

Advantages

- Increases ultimate strength of concrete.
- Improves workability of the concrete.
- Decreases risk of segregation.
- Extends the casting and placing time of concrete.
- Provides smooth surface finish for concrete in the formwork without any segregation.
- Prevents cold joints during concrete production with long casting time.

Areas of Use

- Ready mixed concrete production (with or without pump)
- Hot weather concreting
- Long distance concrete transportation
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Mass concrete and roller compacted concrete applications

Terms of Use

- **ARSTEP 40 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- In Summer: Arstep 40 S
- In Winter: Arstep 40 W
- At Normal Temperature: Arstep 40

Consumption Dosage

ARSTEP 40 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.



Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **ARSTEP 40 SERIES** products should be added into the rest of water and should be mixed properly.

Warning: Concrete mix design and admixture dosage should be determined by laboratory tests according to the concrete class and properties.

Compatibility with Other Admixtures

ARSTEP 40 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Doz Series
- Arset Friz Series
- Arset Fast Series
- Arset Retard Series
- Arset Waterproof Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSTEP 40 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

■ ARSTEP 40 / 40 S / 40 W

■ ARSTEP 45 / 45 S / 45 W



ARSTEP 50 Series

Water Reducing / Plasticizer Concrete Admixtures

Product Description

ARSTEP 50 SERIES products are naphthalene sulfonate / lignosulfonate based water reducing plasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio. Summer (**S**) type products have the feature of delaying setting (consistency protection) in hot weather. Winter (**W**) type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form (**CONS**).

ARSTEP 50 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES

Chemical Base	Naphthalene sulfonate / Lignosulfonate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	< 0,1 (EN 480-10)
Alkaline Content (%)	< 10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS

Arstep 50	EN 934-2 Table 2 ASTM C 494 Type A
Arstep 50 S	EN 934-2 Table 10 ASTM C 494 Type D
Arstep 50 W	EN 934-2 Table 2 ASTM C 494 Type E

Advantages

- Increases ultimate strength of concrete.
- Improves workability of the concrete.
- Decreases risk of segregation.
- Extends the casting and placing time of concrete.
- Provides smooth surface finish for concrete in the formwork without any segregation.
- Prevents cold joints during concrete production with long casting time.

Areas of Use

- Ready mixed concrete production (with or without pump)
- Hot weather concreting
- Long distance concrete transportation
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Mass concrete and roller compacted concrete applications

Terms of Use

- **ARSTEP 50 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- In Summer: Arstep 50 S
- In Winter: Arstep 50 W
- At Normal Temperature: Arstep 50

Consumption Dosage

ARSTEP 50 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.



Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, ARSTEP 50 SERIES products should be added into the rest of water and should be mixed properly.

Warning: Concrete mix design and admixture dosage should be determined by laboratory tests according to the concrete class and properties.

Compatibility with Other Admixtures

ARSTEP 50 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Doz Series
- Arset Friz Series
- Arset Fast Series
- Arset Retard Series
- Arset Waterproof Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSTEP 50 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

■ ARSTEP 50 / 50 S / 50 W

■ ARSTEP 55 / 55 S / 55 W

ARSTEP EXTRA Series admixtures are high range water reducing / midrange and superplasticizers increasing the strength of concrete by reducing water / cement ratio highly used in ready mixed concrete and precast concrete production and large scale construction projects. There are slump retaining and set-retarding summer versions and set-accelerating winter versions that allow early formwork removal.

**ARSTEP
EXTRA**



- Midrange Plasticizer Concrete Admixtures
- Superplasticizer Concrete Admixtures



		PAGE NO	28	30	32	34	36	38	40	42	44	46
		PRODUCTS	ARSTEP EXTRA 100 SERIES	ARSTEP EXTRA 200 SERIES	ARSTEP EXTRA 300 SERIES	ARSTEP EXTRA 400 SERIES	ARSTEP EXTRA 500 SERIES	ARSTEP EXTRA 600 SERIES	ARSTEP EXTRA 700 SERIES	ARSTEP EXTRA 800 SERIES	ARSTEP EXTRA 900 SERIES	ARSTEP EXTRA 1000 SERIES
USAGE AREAS	Ready-mixed Concrete Production		■	■	■	■	■	■	■	■	■	■
	Precast Concrete Production										■	■
	Self Leveling Concrete Production											
	Shotcrete Production										■	■
	Zero-slump Concrete Production											
	Aggregate Looking Concrete (Wash Concrete) Production											
	Pouring Concrete in Hot Weather		■	■	■	■	■	■	■	■	■	■
	Pouring Concrete in Cold Weather		■	■	■	■	■	■	■	■	■	■
PURPOSE OF USAGE	Slump Retarding		■	■	■	■	■	■	■	■	■	■
	Set Acceleration ^[1]		■	■	■	■	■	■	■	■	■	■
	Set Retarder ^[2]		■	■	■	■	■	■	■	■	■	■
	Early High Strength		■	■	■	■	■	■	■	■	■	■
	Final High Strength		■	■	■	■	■	■	■	■	■	■
	Waterproofing						■	■	■	■	■	■
	Increasing The Hydration Temperature of Concrete and Preventing Freezing											
	Air-entraining											
	Set Retarder in Concrete Surface											
	Re-dosing the Consistency of Concrete											
	Accelerate Hardening											
	Alkali-Silica Reaction (ASR)											
	Corrosion Inhibitor											
	Pumping Aid											

1- Winter versions [W]

2- Summer versions [S]



ARSTEP EXTRA 100 Series

Water Reducing / Midrange Plasticizer Concrete Admixtures

Product Description

ARSTEP EXTRA 100 SERIES products are naphthalene sulfonate / lignosulfonate based water reducing / midrange plasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio. Summer (**S**) type products have the feature of delaying setting (consistency protection) in hot weather. Winter (**W**) type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form (**CONS**).

TECHNICAL PROPERTIES	
Chemical Base	Naphthalene sulfonate / Lignosulfonate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS	
Arstep Extra 100	EN 934-2 Table 2 ASTM C 494 Type A
Arstep Extra 100 S	EN 934-2 Table 10 ASTM C 494 Type D
Arstep Extra 100 W	EN 934-2 Table 2 ASTM C 494 Type E

Advantages

- Increases ultimate strength of concrete.
- Improves workability of the concrete.
- Decreases risk of segregation.
- Extends the casting and placing time of concrete.
- Provides smooth surface finish for concrete in the formwork without any segregation.
- Prevents cold joints during concrete production with long casting time.

Areas of Use

- Ready mixed concrete production (with or without pump)
- Hot weather concreting
- Long distance concrete transportation
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Mass concrete and roller compacted concrete applications

Terms of Use

- **ARSTEP EXTRA 100 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- In Summer: Arstep Extra 100 S
- In Winter: Arstep Extra 100 W
- At Normal Temperature: Arstep Extra 100

Consumption Dosage

ARSTEP EXTRA 100 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **ARSTEP EXTRA 100 SERIES** products should be added into the rest of water and should be mixed properly.



Compatibility with Other Admixtures

ARSTEP EXTRA 100 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Doz Series
- Arset Friz Series
- Arset Fast Series
- Arset Retard Series
- Arset Waterproof Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSTEP EXTRA 100 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- | | |
|------------------------------------|------------------------------------|
| ■ ARSTEP EXTRA 100 / 100 S / 100 W | ■ ARSTEP EXTRA 150 / 150 S / 150 W |
| ■ ARSTEP EXTRA 120 / 120 S / 120 W | ■ ARSTEP EXTRA 159 / 159 S / 159 W |
| ■ ARSTEP EXTRA 122 / 122 S / 122 W | ■ ARSTEP EXTRA 167 W |
| ■ ARSTEP EXTRA 130 / 130 S / 130 W | ■ ARSTEP EXTRA 177 / 177 S / 177 W |
| ■ ARSTEP EXTRA 135 / 135 S / 135 W | ■ ARSTEP EXTRA 180 S |
| ■ ARSTEP EXTRA 140 / 140 S / 140 W | ■ ARSTEP EXTRA 188 / 188 S / 188 W |
| ■ ARSTEP EXTRA 143 / 143 S / 143 W | ■ ARSTEP EXTRA 189 / 189 S / 189 W |
| ■ ARSTEP EXTRA 148 / 148 S / 148 W | |



ARSTEP EXTRA 200 Series

Water Reducing / Midrange Plasticizer Concrete Admixtures

Product Description

ARSTEP EXTRA 200 SERIES products are naphthalene sulfonate / lignosulfonate based water reducing plasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio. Summer (**S**) type products have the feature of delaying setting (consistency protection) in hot weather. Winter (**W**) type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form (**CONS**).

ARSTEP EXTRA 200 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES	
Chemical Base	Naphthalene sulfonate / Lignosulfonate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0.1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS	
Arstep Extra 200	EN 934-2 Table 2 ASTM C 494 Type A
Arstep Extra 200 S	EN 934-2 Table 10 ASTM C 494 Type D
Arstep Extra 200 W	EN 934-2 Table 2 ASTM C 494 Type E

Advantages

- Increases ultimate strength of concrete.
- Improves workability of the concrete.
- Decreases risk of segregation.
- Extends the casting and placing time of concrete.
- Provides smooth surface finish for concrete in the formwork without any segregation.
- Prevents cold joints during concrete production with long casting time.

Areas of Use

- Ready mixed concrete production (with or without pump)
- Hot weather concreting
- Long distance concrete transportation
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Mass concrete and roller compacted concrete applications

Terms of Use

- **ARSTEP EXTRA 200 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- In Summer: Arstep Extra 200 S
- In Winter: Arstep Extra 200 W
- At Normal Temperature: Arstep Extra 200

Consumption Dosage

ARSTEP EXTRA 200 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **ARSTEP EXTRA 200 SERIES** products should be added into the rest of water and should be mixed properly.



Compatibility with Other Admixtures

ARSTEP EXTRA 200 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Retard Series
- Arset Doz Series
- Arset Waterproof Series
- Arset Friz Series
- Arset Zero Series
- Arset Fast Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSTEP EXTRA 200 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- | | |
|------------------------------------|------------------------------------|
| ■ ARSTEP EXTRA 200 / 200 S / 200 W | ■ ARSTEP EXTRA 232 / 232 S / 232 W |
| ■ ARSTEP EXTRA 202 / 202 S / 202 W | ■ ARSTEP EXTRA 244 / 244 S / 244 W |
| ■ ARSTEP EXTRA 205 / 205 S / 205 W | ■ ARSTEP EXTRA 245 S |
| ■ ARSTEP EXTRA 210 / 210 S / 210 W | ■ ARSTEP EXTRA 250 / 250 S / 250 W |
| ■ ARSTEP EXTRA 212 / 212 S / 212 W | ■ ARSTEP EXTRA 253 S |
| ■ ARSTEP EXTRA 215 / 215 S / 215 W | ■ ARSTEP EXTRA 254 / 254 S / 254 W |
| ■ ARSTEP EXTRA 216 / 216 S / 216 W | ■ ARSTEP EXTRA 260 / 260 S / 260 W |
| ■ ARSTEP EXTRA 223 / 223 S / 223 W | ■ ARSTEP EXTRA 261 / 261 S / 261 W |
| ■ ARSTEP EXTRA 225 S | ■ ARSTEP EXTRA 267 / 267 S / 267 W |
| ■ ARSTEP EXTRA 228 / 228 S / 228 W | ■ ARSTEP EXTRA 280 / 280 S / 280 W |
| ■ ARSTEP EXTRA 229 / 229 S / 229 W | ■ ARSTEP EXTRA 285 / 285 S / 285 W |



ARSTEP EXTRA 300 Series

Water Reducing / Midrange Plasticizer Concrete Admixtures

Product Description

ARSTEP EXTRA 300 SERIES products are naphthalene sulfonate / lignosulfonate based water reducing plasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio. Summer (**S**) type products have the feature of delaying setting (consistency protection) in hot weather. Winter (**W**) type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form (**CONS**).

ARSTEP EXTRA 300 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES	
Chemical Base	Naphthalene sulfonate / Lignosulfonate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS	
Arstep Extra 300	EN 934-2 Table 2 ASTM C 494 Type A
Arstep Extra 300 S	EN 934-2 Table 10 ASTM C 494 Type D
Arstep Extra 300 W	EN 934-2 Table 2 ASTM C 494 Type E

Advantages

- Increases ultimate strength of concrete.
- Improves workability of the concrete.
- Decreases risk of segregation.
- Extends the casting and placing time of concrete.
- Provides smooth surface finish for concrete in the formwork without any segregation.
- Prevents cold joints during concrete production with long casting time.

Areas of Use

- Ready mixed concrete production (with or without pump)
- Hot weather concreting
- Long distance concrete transportation
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Mass concrete and roller compacted concrete applications

Terms of Use

- **ARSTEP EXTRA 300 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- In Summer: Arstep Extra 300 S
- In Winter: Arstep Extra 300 W
- At Normal Temperature: Arstep Extra 300

Consumption Dosage

ARSTEP EXTRA 300 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **ARSTEP EXTRA 300 SERIES** products should be added into the rest of water and should be mixed properly.



Compatibility with Other Admixtures

ARSTEP EXTRA 300 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Retard Series
- Arset Doz Series
- Arset Waterproof Series
- Arset Friz Series
- Arset Zero Series
- Arset Fast Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSTEP EXTRA 300 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- | | |
|---|--|
| ■ ARSTEP EXTRA 300 / 300 S / 300 W | ■ ARSTEP EXTRA 378 / 378 S / 378 W |
| ■ ARSTEP EXTRA 306 / 306 S / 306 W | ■ ARSTEP EXTRA 385 S |
| ■ ARSTEP EXTRA 310 / 310 S / 310 W | ■ ARSTEP EXTRA 386 / 386 S / 386 W |
| ■ ARSTEP EXTRA 315 / 315 S / 315 W | ■ ARSTEP EXTRA 390 (ARSTEP EXTRA 1970) |
| ■ ARSTEP EXTRA 325 S | ■ ARSTEP EXTRA 390 S / 390 W |
| ■ ARSTEP EXTRA 326 / 326 S / 326 W | ■ ARSTEP EXTRA 391 (ARSTEP EXTRA 2010) |
| ■ ARSTEP EXTRA 328 / 328 S / 328 W | ■ ARSTEP EXTRA 391 S / 391 W |
| ■ ARSTEP EXTRA 330 S | ■ ARSTEP EXTRA 392 (ARSTEP EXTRA 1931) |
| ■ ARSTEP EXTRA 335 S | ■ ARSTEP EXTRA 392 S (ARSTEP EXTRA 1931 S) |
| ■ ARSTEP EXTRA 350 S | ■ ARSTEP EXTRA 392 W (ARSTEP EXTRA 1931 W) |
| ■ ARSTEP EXTRA 355 / 355 S / 355 W / 355 CONS | ■ ARSTEP EXTRA 392 SX (ARSTEP EXTRA 1931 SX) |
| ■ ARSTEP EXTRA 356 / 356 S / 356 W | ■ ARSTEP EXTRA 393 (ARSTEP EXTRA 2456) |
| ■ ARSTEP EXTRA 357 / 357 S / 357 W | ■ ARSTEP EXTRA 393 S / 393 W |
| ■ ARSTEP EXTRA 358 / 358 S / 358 W | ■ ARSTEP EXTRA 394 / 394 S |
| ■ ARSTEP EXTRA 359 / 359 S / 359 W | ■ ARSTEP EXTRA 394 W (ARSTEP EXTRA 1967 W) |
| ■ ARSTEP EXTRA 360 S | ■ ARSTEP EXTRA 395 / 395 S |
| ■ ARSTEP EXTRA 365 W | ■ ARSTEP EXTRA 395 W (ARSTEP EXTRA 2410 W) |
| ■ ARSTEP EXTRA 366 / 366 S / 366 W | ■ ARSTEP EXTRA 396 / 396 S |
| ■ ARSTEP EXTRA 375 / 375 S / 375 W | ■ ARSTEP EXTRA 396 W (ARSTEP EXTRA 2533 W) |
| ■ ARSTEP EXTRA 377 / 377 S / 377 W | |

* In case of name change, the previous name of the product is shown in parenthesis.



ARSTEP EXTRA 400 Series

Water Reducing / Midrange Plasticizer Concrete Admixtures

Product Description

ARSTEP EXTRA 400 SERIES products are naphthalene sulfonate / lignosulfonate based water reducing / midrange plasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio.

Summer (**S**) type products have the feature of delaying setting (consistency protection) in hot weather. Winter (**W**) type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form (**CONS**).

ARSTEP EXTRA 400 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES

Chemical Base	Naphthalene sulfonate / Lignosulfonate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0.1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS

Arstep Extra 400	EN 934-2 Table 2 ASTM C 494 Type A
Arstep Extra 400 S	EN 934-2 Table 10 ASTM C 494 Type D
Arstep Extra 400 W	EN 934-2 Table 2 ASTM C 494 Type E

Advantages

- Increases ultimate strength of concrete.
- Improves workability of the concrete.
- Decreases risk of segregation.
- Extends the casting and placing time of concrete.
- Provides smooth surface finish for concrete in the formwork without any segregation.
- Prevents cold joints during concrete production with long casting time.

Areas of Use

- Ready mixed concrete production (with or without pump)
- Hot weather concreting
- Long distance concrete transportation
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Mass concrete and roller compacted concrete applications

Terms of Use

- **ARSTEP EXTRA 400 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- In Summer: Arstep Extra 400 S
- In Winter: Arstep Extra 400 W
- At Normal Temperature: Arstep Extra 400

Consumption Dosage

ARSTEP EXTRA 400 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **ARSTEP EXTRA 400 SERIES** products should be added into the rest of water and should be mixed properly.



Compatibility with Other Admixtures

ARSTEP EXTRA 400 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Retard Series
- Arset Doz Series
- Arset Waterproof Series
- Arset Friz Series
- Arset Zero Series
- Arset Fast Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSTEP EXTRA 400 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- | | |
|---|---|
| ■ ARSTEP EXTRA 400 / 400 S / 400 W | ■ ARSTEP EXTRA 456 / 456 S / 456 W |
| ■ ARSTEP EXTRA 404 / 404 S / 404 W | ■ ARSTEP EXTRA 458 W |
| ■ ARSTEP EXTRA 410 / 410 S / 410 W | ■ ARSTEP EXTRA 460 S |
| ■ ARSTEP EXTRA 411 / 411 S / 411 W | ■ ARSTEP EXTRA 470 / 470 S |
| ■ ARSTEP EXTRA 412 / 412 S / 412 W | ■ ARSTEP EXTRA 472 S |
| ■ ARSTEP EXTRA 413 / 413 S / 413 W | ■ ARSTEP EXTRA 480 / 480 S / 480 W / 480 WX |
| ■ ARSTEP EXTRA 414 / 414 S / 414 W | ■ ARSTEP EXTRA 481 (ARSTEP EXTRA 480 B) |
| ■ ARSTEP EXTRA 415 / 415 S / 415 W | ■ ARSTEP EXTRA 482 (ARSTEP EXTRA 480 G) |
| ■ ARSTEP EXTRA 416 S | ■ ARSTEP EXTRA 483 (ARSTEP EXTRA 480-5) |
| ■ ARSTEP EXTRA 420 / 420 S / 420 W | ■ ARSTEP EXTRA 484 / 484 S / 484 W |
| ■ ARSTEP EXTRA 420 / 420 S / 420 W | ■ ARSTEP EXTRA 485 / 485 S |
| ■ ARSTEP EXTRA 425 S | ■ ARSTEP EXTRA 486 (ARSTEP EXTRA 480-6) |
| ■ ARSTEP EXTRA 437 / 437 S / 437 W | ■ ARSTEP EXTRA 487 (ARSTEP EXTRA 480 BS-1) |
| ■ ARSTEP EXTRA 439 / 439 S / 439 W | ■ ARSTEP EXTRA 488 (ARSTEP EXTRA 481-3) |
| ■ ARSTEP EXTRA 439 / 439 S / 439 W | ■ ARSTEP EXTRA 489 (ARSTEP EXTRA 481-3 S) |
| ■ ARSTEP EXTRA 440 / 440 S / 440 W | ■ ARSTEP EXTRA 490 / 490 S / 490 W |
| ■ ARSTEP EXTRA 443 / 443 S | ■ ARSTEP EXTRA 491 (ARSTEP EXTRA 1871) |
| ■ ARSTEP EXTRA 444 S | ■ ARSTEP EXTRA 491 S (ARSTEP EXTRA 1871 S) |
| ■ ARSTEP EXTRA 445 / 445 S / 445 W | ■ ARSTEP EXTRA 491 W (ARSTEP EXTRA 1871 W) |
| ■ ARSTEP EXTRA 446 (ARSTEP EXTRA 446 LMS) | ■ ARSTEP EXTRA 492 (ARSTEP EXTRA 1733) |
| ■ ARSTEP EXTRA 447 (ARSTEP EXTRA 445-1 W) | ■ ARSTEP EXTRA 493 (ARSTEP EXTRA 2152) |
| ■ ARSTEP EXTRA 448 (ARSTEP EXTRA 445-2) | ■ ARSTEP EXTRA 493 S (ARSTEP EXTRA 1733 S) |
| ■ ARSTEP EXTRA 449 (ARSTEP EXTRA 443 -3) | ■ ARSTEP EXTRA 494 S (ARSTEP EXTRA 2190 S) |
| ■ ARSTEP EXTRA 453 / 453 S / 453 W | ■ ARSTEP EXTRA 495 (ARSTEP EXTRA 2192) |
| ■ ARSTEP EXTRA 455 W | ■ ARSTEP EXTRA 496 W (ARSTEP EXTRA 1931-5W) |

* In case of name change, the previous name of the product is shown in parenthesis.



ARSTEP EXTRA 500 Series

High Range Water Reducing / Superplasticizer Concrete Admixtures

Product Description

ARSTEP EXTRA 500 SERIES products are naphthalene sulfonate / lignosulfonate based high range water reducing / superplasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio.

Summer (**S**) type products have the feature of delaying setting (consistency protection) in hot weather. Winter (**W**) type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form (**CONS**).

ARSTEP EXTRA 500 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES

Chemical Base	Naphthalene sulfonate / Lignosulfonate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0.1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS

Arstep Extra 500	EN 934-2 Table 3.1-3.2 ASTM C 494 Type F
Arstep Extra 500 S	EN 934-2 Table 11.1-11.2 ASTM C 494 Type G
Arstep Extra 500 W	EN 934-2 Table 3.1-3.2 ASTM C 494 Type F

Advantages

- Increases ultimate strength of concrete.
- Improves workability of the concrete.
- Decreases risk of segregation.
- Extends the casting and placing time of concrete.
- Provides smooth surface finish for concrete in the formwork without any segregation.
- Prevents cold joints during concrete production with long casting time.

Areas of Use

- Ready mixed concrete production (with or without pump)
- Hot weather concreting
- Long distance concrete transportation
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Precast and precast concrete production
- Mass concrete and roller compacted concrete applications

Terms of Use

- **ARSTEP EXTRA 500 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- **In Summer:** Arstep Extra 500 S
- **In Winter:** Arstep Extra 500 W
- **At Normal Temperature:** Arstep Extra 500

Consumption Dosage

ARSTEP EXTRA 500 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.



Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **ARSTEP EXTRA 500 SERIES** products should be added into the rest of water and should be mixed properly.

Compatibility with Other Admixtures

ARSTEP EXTRA 500 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Doz Series
- Arset Friz Series
- Arset Fast Series
- Arset Retard Series
- Arset Waterproof Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSTEP EXTRA 500 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- | | |
|---|---|
| ■ ARSTEP EXTRA 500 / 500 S | ■ ARSTEP EXTRA 559 |
| ■ ARSTEP EXTRA 501 / 501 W | ■ ARSTEP EXTRA 561 / 561 S / 561 W |
| ■ ARSTEP EXTRA 502 W / 502 WX | ■ ARSTEP EXTRA 563 S / 563 W |
| ■ ARSTEP EXTRA 513 / 513 S / 513 W | ■ ARSTEP EXTRA 565 / 565 S / 565 W |
| ■ ARSTEP EXTRA 514 W (ARSTEP EXTRA 513 GW) | ■ ARSTEP EXTRA 566 (ARSTEP EXTRA 2039) |
| ■ ARSTEP EXTRA 518 S | ■ ARSTEP EXTRA 566 W (ARSTEP EXTRA 2039 W) |
| ■ ARSTEP EXTRA 520 | ■ ARSTEP EXTRA 567 W (ARSTEP EXTRA 2012 W) |
| ■ ARSTEP EXTRA 530 (ARSTEP EXTRA 530 N) | ■ ARSTEP EXTRA 568 W (ARSTEP EXTRA 2275 W) |
| ■ ARSTEP EXTRA 535 (ARSTEP EXTRA 535-5 W) | ■ ARSTEP EXTRA 577 / 577 S / 577 W |
| ■ ARSTEP EXTRA 539 W | ■ ARSTEP EXTRA 578 W (ARSTEP EXTRA 577-3 W) |
| ■ ARSTEP EXTRA 542 / 542 S / 542 W | ■ ARSTEP EXTRA 579 W |
| ■ ARSTEP EXTRA 543 / 543 S | ■ ARSTEP EXTRA 580 S |
| ■ ARSTEP EXTRA 549 / 549 S | ■ ARSTEP EXTRA 589 S |
| ■ ARSTEP EXTRA 550 S | ■ ARSTEP EXTRA 590 W |
| ■ ARSTEP EXTRA 553 / 553 W | ■ ARSTEP EXTRA 596 / 596 S |
| ■ ARSTEP EXTRA 555 / 555 S / 555 W / 555 WX | ■ ARSTEP EXTRA 598 |
| ■ ARSTEP EXTRA 558 | |

* In case of name change, the previous name of the product is shown in parenthesis.



ARSTEP EXTRA 600 Series

High Range Water Reducing / Superplasticizer Concrete Admixtures

Product Description

ARSTEP EXTRA 600 SERIES products are naphthalene sulfonate / lignosulfonate based high range water reducing / superplasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio.

Summer **(S)** type products have the feature of delaying setting (consistency protection) in hot weather. Winter **(W)** type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form **(CONS)**.

ARSTEP EXTRA 600 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES

Chemical Base	Naphthalene sulfonate / Lignosulfonate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS

Arstep Extra 600	TS EN 934-2 Table 3.1-3.2 ASTM C 494 Type F
Arstep Extra 600 S	TS EN 934-2 Table 11.1-11.2 ASTM C 494 Type G
Arstep Extra 600 W	TS EN 934-2 Table 3.1-3.2 ASTM C 494 Type F

Advantages

- Increases ultimate strength of concrete.
- Improves workability of the concrete.
- Decreases risk of segregation.
- Extends the casting and placing time of concrete.
- Provides smooth surface finish for concrete in the formwork without any segregation.
- Prevents cold joints during concrete production with long casting time.

Areas of Use

- Ready mixed concrete production (with or without pump)
- Hot weather concreting
- Long distance concrete transportation
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Precast and precast concrete production
- Mass concrete and roller compacted concrete applications

Terms of Use

- **ARSTEP EXTRA 600 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- **In Summer:** Arstep Extra 600 S
- **In Winter:** Arstep Extra 600 W
- **At Normal Temperature:** Arstep Extra 600

Consumption Dosage

ARSTEP EXTRA 600 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.



Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **ARSTEP EXTRA 600 SERIES** products should be added into the rest of water and should be mixed properly.

Compatibility with Other Admixtures

ARSTEP EXTRA 600 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Doz Series
- Arset Friz Series
- Arset Fast Series
- Arset Retard Series
- Arset Waterproof Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSTEP EXTRA 600 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- | | |
|---|--|
| ■ ARSTEP EXTRA 600 S | ■ ARSTEP EXTRA 650 S |
| ■ ARSTEP EXTRA 604 W | ■ ARSTEP EXTRA 661 / 661 W |
| ■ ARSTEP EXTRA 615 / 615 S / 615 W | ■ ARSTEP EXTRA 664 S |
| ■ ARSTEP EXTRA 616 (ARSTEP EXTRA 615-1) | ■ ARSTEP EXTRA 665 / 665 S |
| ■ ARSTEP EXTRA 617 | ■ ARSTEP EXTRA 666 / 666 S / 666 W |
| ■ ARSTEP EXTRA 620 / 620 S / 620 W | ■ ARSTEP EXTRA 667 S / 667 W |
| ■ ARSTEP EXTRA 622 S | ■ ARSTEP EXTRA 671 (ARSTEP EXTRA 672-1) |
| ■ ARSTEP EXTRA 624 W | ■ ARSTEP EXTRA 672 / 672 S |
| ■ ARSTEP EXTRA 625 / 625 W | ■ ARSTEP EXTRA 673 / 673 S / 673 W |
| ■ ARSTEP EXTRA 626 S | ■ ARSTEP EXTRA 675 W (ARSTEP EXTRA 675 ÇW) |
| ■ ARSTEP EXTRA 632 S | ■ ARSTEP EXTRA 678 W |
| ■ ARSTEP EXTRA 635 S | ■ ARSTEP EXTRA 688 / 688 S / 688 W |
| ■ ARSTEP EXTRA 641 | ■ ARSTEP EXTRA 690 |
| ■ ARSTEP EXTRA 647 / 647 S / 647 W | |

* In case of name change, the previous name of the product is shown in parenthesis.



ARSTEP EXTRA 700 Series

High Range Water Reducing / Superplasticizer Concrete Admixtures

Product Description

ARSTEP EXTRA 700 SERIES products are naphthalene sulfonate / lignosulfonate based high range water reducing / superplasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio.

Summer **(S)** type products have the feature of delaying setting (consistency protection) in hot weather. Winter **(W)** type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form **(CONS)**.

ARSTEP EXTRA 700 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES

Chemical Base	Naphthalene sulfonate / Lignosulfonate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS

Arstep Extra 700	EN 934-2 Table 3.1-3.2 ASTM C 494 Type F
Arstep Extra 700 S	EN 934-2 Table 11.1-11.2 ASTM C 494 Type G
Arstep Extra 700 W	EN 934-2 Table 3.1-3.2 ASTM C 494 Type F

Advantages

- Increases ultimate strength of concrete.
- Improves workability of the concrete.
- Decreases risk of segregation.
- Extends the casting and placing time of concrete.
- Provides smooth surface finish for concrete in the formwork without any segregation.
- Prevents cold joints during concrete production with long casting time.

Areas of Use

- Ready mixed concrete production (with or without pump)
- Hot weather concreting
- Long distance concrete transportation
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Precast and precast concrete production
- Mass concrete and roller compacted concrete applications

Terms of Use

- **ARSTEP EXTRA 700 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- **In Summer:** Arstep Extra 700 S
- **In Winter:** Arstep Extra 700 W
- **At Normal Temperature:** Arstep Extra 700

Consumption Dosage

ARSTEP EXTRA 700 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.



Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **ARSTEP EXTRA 700 SERIES** products should be added into the rest of water and should be mixed properly.

Compatibility with Other Admixtures

ARSTEP EXTRA 700 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Doz Series
- Arset Friz Series
- Arset Fast Series
- Arset Retard Series
- Arset Waterproof Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSTEP EXTRA 700 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- | | |
|---|--|
| ■ ARSTEP EXTRA 700 S | ■ ARSTEP EXTRA 738 / 738 W |
| ■ ARSTEP EXTRA 701 | ■ ARSTEP EXTRA 740 (ARSTEP EXTRA 723 YBS) |
| ■ ARSTEP EXTRA 711 / 711 S CONS | ■ ARSTEP EXTRA 742 S |
| ■ ARSTEP EXTRA 720 S | ■ ARSTEP EXTRA 750 S |
| ■ ARSTEP EXTRA 723 (ARSTEP EXTRA 723 B) | ■ ARSTEP EXTRA 752 / 752 S / 752 W / 752 WX |
| ■ ARSTEP EXTRA 723 S / 723 W | ■ ARSTEP EXTRA 753 W (ARSTEP EXTRA 752 ÖZ W) |
| ■ ARSTEP EXTRA 724 (ARSTEP EXTRA 723-3) | ■ ARSTEP EXTRA 758 / 758 W / 758 WX |
| ■ ARSTEP EXTRA 725 | ■ ARSTEP EXTRA 760 S |
| ■ ARSTEP EXTRA 727 / 727 S | ■ ARSTEP EXTRA 762 |
| ■ ARSTEP EXTRA 728 / 728 W / 728 WX | ■ ARSTEP EXTRA 777 S |
| ■ ARSTEP EXTRA 729 S / 729 W | ■ ARSTEP EXTRA 780 S |
| ■ ARSTEP EXTRA 730 W | ■ ARSTEP EXTRA 793 S / 793 W |
| ■ ARSTEP EXTRA 735 W | |

* In case of name change, the previous name of the product is shown in parenthesis.



ARSTEP EXTRA 800 Series

High Range Water Reducing / Superplasticizer Concrete Admixtures

Product Description

ARSTEP EXTRA 800 SERIES products are naphthalene sulfonate / lignosulfonate based high range water reducing / superplasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio.

Summer **(S)** type products have the feature of delaying setting (consistency protection) in hot weather. Winter **(W)** type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form **(CONS)**.

ARSTEP EXTRA 800 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES

Chemical Base	Naphthalene sulfonate / Lignosulfonate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS

Arstep Extra 800	EN 934-2 Table 3.1-3.2 ASTM C 494 Type F
Arstep Extra 800 S	EN 934-2 Table 11.1-11.2 ASTM C 494 Type G
Arstep Extra 800 W	EN 934-2 Table 3.1-3.2 ASTM C 494 Type F

Advantages

- Increases ultimate strength of concrete.
- Improves workability of the concrete.
- Decreases risk of segregation.
- Extends the casting and placing time of concrete.
- Provides smooth surface finish for concrete in the formwork without any segregation.
- Prevents cold joints during concrete production with long casting time.

Areas of Use

- Ready mixed concrete production (with or without pump)
- Hot weather concreting
- Long distance concrete transportation
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Precast and precast concrete production
- Mass concrete and roller compacted concrete applications

Terms of Use

- **ARSTEP EXTRA 800 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- **In Summer:** Arstep Extra 800 S
- **In Winter:** Arstep Extra 800 W
- **At Normal Temperature:** Arstep Extra 800

Consumption Dosage

ARSTEP EXTRA 800 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.



Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **ARSTEP EXTRA 800 SERIES** products should be added into the rest of water and should be mixed properly.

Compatibility with Other Admixtures

ARSTEP EXTRA 800 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Doz Series
- Arset Friz Series
- Arset Fast Series
- Arset Retard Series
- Arset Waterproof Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSTEP EXTRA 800 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- | | |
|--|---|
| ■ ARSTEP EXTRA 800 S | ■ ARSTEP EXTRA 850 S |
| ■ ARSTEP EXTRA 810 | ■ ARSTEP EXTRA 855 / 855 S |
| ■ ARSTEP EXTRA 813 | ■ ARSTEP EXTRA 858 / 858 S / 858 W / 858 WX |
| ■ ARSTEP EXTRA 816 S | ■ ARSTEP EXTRA 859 W |
| ■ ARSTEP EXTRA 820 | ■ ARSTEP EXTRA 860 (ARSTEP EXTRA 2512) |
| ■ ARSTEP EXTRA 827 (ARSTEP EXTRA 827 / ARSTEP EXTRA 827 B) | ■ ARSTEP EXTRA 867 / 867 S / 867 W |
| ■ ARSTEP EXTRA 827 S / 827 W | ■ ARSTEP EXTRA 871 / 871 S / 871 W |
| ■ ARSTEP EXTRA 828 (ARSTEP EXTRA 828-2) | ■ ARSTEP EXTRA 873 / 873 W |
| ■ ARSTEP EXTRA 830 (ARSTEP EXTRA 827 AGB) | ■ ARSTEP EXTRA 874 S (ARSTEP EXTRA 873-1 S) |
| ■ ARSTEP EXTRA 832 | ■ ARSTEP EXTRA 880 / 880 S |
| ■ ARSTEP EXTRA 838 / 838 W | ■ ARSTEP EXTRA 888 S |
| ■ ARSTEP EXTRA 839 | ■ ARSTEP EXTRA 890 S |
| ■ ARSTEP EXTRA 840 S | |

* In case of name change, the previous name of the product is shown in parenthesis.



ARSTEP EXTRA 900 Series

High Range Water Reducing / Superplasticizer Concrete Admixtures

Product Description

ARSTEP EXTRA 900 SERIES products are naphthalene sulfonate / lignosulfonate based high range water reducing / superplasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio.

Summer **(S)** type products have the feature of delaying setting (consistency protection) in hot weather. Winter **(W)** type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form **(CONS)**.

ARSTEP EXTRA 900 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES

Chemical Base	Naphthalene sulfonate / Lignosulfonate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS

Arstep Extra 900	EN 934-2 Table 3.1-3.2 ASTM C 494 Type F
Arstep Extra 900 S	EN 934-2 Table 11.1-11.2 ASTM C 494 Type G
Arstep Extra 900 W	EN 934-2 Table 3.1-3.2 ASTM C 494 Type F

Advantages

- Increases ultimate strength of concrete.
- Improves workability of the concrete.
- Decreases risk of segregation.
- Extends the casting and placing time of concrete.
- Provides smooth surface finish for concrete in the formwork without any segregation.
- Prevents cold joints during concrete production with long casting time.

Areas of Use

- Ready mixed concrete production (with or without pump)
- Hot weather concreting
- Long distance concrete transportation
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Precast and precast concrete production
- Mass concrete and roller compacted concrete applications

Terms of Use

- **ARSTEP EXTRA 900 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- **In Summer:** Arstep Extra 900 S
- **In Winter:** Arstep Extra 900 W
- **At Normal Temperature:** Arstep Extra 900

Consumption Dosage

ARSTEP EXTRA 900 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.



Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, ARSTEP EXTRA 900 SERIES products should be added into the rest of water and should be mixed properly.

Compatibility with Other Admixtures

ARSTEP EXTRA 900 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Doz Series
- Arset Friz Series
- Arset Fast Series
- Arset Retard Series
- Arset Waterproof Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSTEP EXTRA 900 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- | | |
|---|---|
| ■ ARSTEP EXTRA 900 S | ■ ARSTEP EXTRA 937 |
| ■ ARSTEP EXTRA 908 W | ■ ARSTEP EXTRA 938 / 938 W |
| ■ ARSTEP EXTRA 910 / 910 S | ■ ARSTEP EXTRA 939 (ARSTEP EXTRA 938-1 R) |
| ■ ARSTEP EXTRA 911 (ARSTEP EXTRA 2234) | ■ ARSTEP EXTRA 940 (ARSTEP EXTRA 936 EXTRA) |
| ■ ARSTEP EXTRA 912 W | ■ ARSTEP EXTRA 941 (ARSTEP EXTRA 936-1 EXTRA) |
| ■ ARSTEP EXTRA 913 W (ARSTEP EXTRA 2234 W) | ■ ARSTEP EXTRA 946 / 946 W |
| ■ ARSTEP EXTRA 915 S | ■ ARSTEP EXTRA 950 / 950 S / 950 W / 950 WX |
| ■ ARSTEP EXTRA 916 | ■ ARSTEP EXTRA 955 WX |
| ■ ARSTEP EXTRA 925 / 925 S / 925 W / 925 WX | ■ ARSTEP EXTRA 956 S |
| ■ ARSTEP EXTRA 926 S (ARSTEP EXTRA 926 S-1) | ■ ARSTEP EXTRA 958 |
| ■ ARSTEP EXTRA 926 W | ■ ARSTEP EXTRA 960 W / 960 WX |
| ■ ARSTEP EXTRA 927 (ARSTEP EXTRA 925 NS) | ■ ARSTEP EXTRA 965 (ARSTEP EXTRA 925 N) |
| ■ ARSTEP EXTRA 929 WX (ARSTEP EXTRA 925-1 WX) | ■ ARSTEP EXTRA 965 W (ARSTEP EXTRA 925 NW) |
| ■ ARSTEP EXTRA 930 / 930 S / 930 W / 930 WX | ■ ARSTEP EXTRA 966 |
| ■ ARSTEP EXTRA 931 W | ■ ARSTEP EXTRA 967 / 967 S / 967 W / 967 WX |
| ■ ARSTEP EXTRA 932 W | ■ ARSTEP EXTRA 968 (ARSTEP EXTRA 967-5 KC) |
| ■ ARSTEP EXTRA 933 (ARSTEP EXTRA 930 E) | ■ ARSTEP EXTRA 969 W |
| ■ ARSTEP EXTRA 933 S (ARSTEP EXTRA 930 ES) | ■ ARSTEP EXTRA 970 (ARSTEP EXTRA 2000 EXT) |
| ■ ARSTEP EXTRA 934 S (ARSTEP EXTRA 930 D) | ■ ARSTEP EXTRA 978 / 978 S / 978 W |
| ■ ARSTEP EXTRA 936 / 936 S / 936 W / 936 WX | ■ ARSTEP EXTRA 980 / 980 S |

* In case of name change, the previous name of the product is shown in parenthesis.



ARSTEP EXTRA 1000 Series

High Range Water Reducing / Superplasticizer Concrete Admixtures

Product Description

ARSTEP EXTRA 1000 SERIES products are naphthalene sulfonate / lignosulfonate based high range water reducing / superplasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio.

Summer **(S)** type products have the feature of delaying setting (consistency protection) in hot weather. Winter **(W)** type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form **(CONS)**.

ARSTEP EXTRA 1000 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES

Chemical Base	Naphthalene sulfonate / Lignosulfonate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 [EN 480-10]
Alkaline Content (%)	<10 [EN 480-12]
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS

Arstep Extra 1000	EN 934-2 Table 3.1-3.2 ASTM C 494 Type F
Arstep Extra 1000 S	EN 934-2 Table 11.1-11.2 ASTM C 494 Type G
Arstep Extra 1000 W	EN 934-2 Table 3.1-3.2 ASTM C 494 Type F

Advantages

- Increases ultimate strength of concrete.
- Improves workability of the concrete.
- Decreases risk of segregation.
- Extends the casting and placing time of concrete.
- Provides smooth surface finish for concrete in the formwork without any segregation.
- Prevents cold joints during concrete production with long casting time.

Areas of Use

- Ready mixed concrete production (with or without pump)
- Hot weather concreting
- Long distance concrete transportation
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Precast and precast concrete production
- Mass concrete and roller compacted concrete applications

Terms of Use

- **ARSTEP EXTRA 1000 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- **In Summer:** Arstep Extra 1000 S
- **In Winter:** Arstep Extra 1000 W
- **At Normal Temperature:** Arstep Extra 1000

Consumption Dosage

ARSTEP EXTRA 1000 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.



Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **ARSTEP EXTRA 1000 SERIES** products should be added into the rest of water and should be mixed properly.

Compatibility with Other Admixtures

ARSTEP EXTRA 1000 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Doz Series
- Arset Friz Series
- Arset Fast Series
- Arset Retard Series
- Arset Waterproof Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSTEP EXTRA 1000 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- ARSTEP EXTRA 1000
- ARSTEP EXTRA 1001
- ARSTEP EXTRA 1050 (ARSTEP EXTRA 2526-1)
- ARSTEP EXTRA 1101
- ARSTEP EXTRA 1871 S / 1871 W

* In case of name change, the previous name of the product is shown in parenthesis.

***DEGASET Series** admixtures are New Generation Superplasticizers.*

These are high range water reducing new generation superplasticizers; increasing the early and final strength of high performance concrete by reducing water / cement ratio in ready-mixed concrete and precast concrete production. There are slump retaining and set-retarding summer versions and set-accelerating winter versions that allow early formwork removal.

DEGASET



- New Generation Superplasticizer High Performance Concrete Admixtures



		PAGE NO	50	52	54	56	58	60	62	65	68	70	72	74
		PRODUCTS	DEGAJET AS 1000 SERIES	DEGAJET AS 2000 SERIES	DEGAJET AS 3000 SERIES	DEGAJET AX 1000 SERIES	DEGAJET AX 2000 SERIES	DEGAJET AX 3000 SERIES	DEGAJET AX 4000 SERIES	DEGAJET AX 5000 SERIES	DEGAJET AX 6000 SERIES	DEGAJET PC 7000 SERIES	DEGAJET PC 8000 SERIES	DEGAJET PC 9000 SERIES
USAGE AREAS	Ready-mixed Concrete Production		■	■	■	■	■	■	■	■	■			
	Precast Concrete Production											■	■	■
	Self Leveling Concrete Production		■	■	■	■	■	■	■	■	■			
	Shotcrete Production											■	■	■
	Zero-slump Concrete Production													
	Aggregate Looking Concrete (Wash Concrete) Production													
	Pouring Concrete in Hot Weather		■	■	■	■	■	■	■	■	■	■	■	■
	Pouring Concrete in Cold Weather		■	■	■	■	■	■	■	■	■	■	■	■
PURPOSE OF USAGE	Slump Retarding		■	■	■	■	■	■	■	■	■	■	■	■
	Set Acceleration ^[1]		■	■	■	■	■	■	■	■	■	■	■	■
	Set Retarder ^[2]		■	■	■	■	■	■	■	■	■	■	■	■
	Early High Strength		■	■	■	■	■	■	■	■	■	■	■	■
	Final High Strength		■	■	■	■	■	■	■	■	■	■	■	■
	Waterproofing		■	■	■	■	■	■	■	■	■	■	■	■
	Increasing The Hydration Temperature of Concrete and Preventing Freezing													
	Air-entraining													
	Set Retarder in Concrete Surface													
	Re-dosing The Consistency of Concrete													
	Accelerate Hardening													
	Alkali-Silica Reaction (ASR)													
	Corrosion Inhibitor													
	Pumping Aid													

1- Winter versions [W]

2- Summer versions [S]



DEGASET AS 1000 Series

High Water Reducing / New Generation Superplasticizer Concrete Admixtures

Product Description

DEGASET AS 1000 SERIES products are polycarboxylate polymer based high water reducing / new generation superplasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio.

Summer **(S)** type products have the feature of delaying setting (consistency protection) in hot weather. Winter **(W)** type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form **(CONS)**.

TECHNICAL PROPERTIES	
Chemical Base	Modified polycarboxylate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

Advantages

- Improves concrete's early and ultimate compressive and tensile strengths and impermeability to water.
- With its high range water reducing capabilities, enables concrete production with low water / cement ratio. Makes corrosion free concrete production possible.
- Enables concrete production with low water / cement ratio free of bleeding and segregation risks.
- Minimizes formwork striking time.
- Increases abrasion resistance of concrete by minimizing segregation and bleeding.
- Shortens application time of resin based flooring systems on fresh concrete.
- Increases freeze-thaw resistance of concrete.
- Easy placement of formwork saves energy from vibration labor.
- Easy setting to densely reinforced sections and impermeable concrete production with smooth surface finish.
- Enables early high strength concrete production in low temperatures.
- Compatible with all cement types.

COMPLIANCE WITH STANDARDS	
Degaset AS 1000	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F
Degaset AS 1000 S	EN 934-2 Table 11.1-11.2 ASTM C 494 Type G
Degaset AS 1000 W	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F

Areas of Use

- Ready-mixed concrete production (with or without pump)
- Self-compacting concrete production
- Production of concrete that can easily set to densely reinforced concrete elements
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Injection and casting applications
- In precast and prefabricated production
- High performance concrete production

Terms of Use

- **DEGASET AS 1000 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture .
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- **In Summer:** Degaset AS 1000 S
- **In Winter:** Degaset AS 1000 W
- **At Normal Temperature:** Degaset AS 1000



Consumption Dosage

DEGASET AS 1000 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **DEGASET AS 1000 SERIES** products should be added into the rest of water and should be mixed properly.

Compatibility with Other Admixtures

DEGASET AS 1000 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Retard Series
- Arset Doz Series
- Arset Waterproof Series
- Arset Friz Series
- Arset Zero Series
- Arset Fast Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **DEGASET AS 1000 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- DEGASET AS 1000
- DEGASET AS 1110
- DEGASET AS 1143 S
- DEGASET AS 1248
- DEGASET AS 1667
- DEGASET AS 1856
- DEGASET AS 1975 / 1975 W
- DEGASET AS 1979 S (DEGASET AS 1979 SK)
- DEGASET AS 1989

* In case of name change, the previous name of the product is shown in parenthesis.



DEGASET AS 2000 Series

High Water Reducing / New Generation Superplasticizer Concrete Admixtures

Product Description

DEGASET AS 2000 SERIES products are polycarboxylate polymer based high water reducing / new generation superplasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio.

Summer **(S)** type products have the feature of delaying setting (consistency protection) in hot weather. Winter **(W)** type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form **(CONS)**.

DEGASET AS 2000 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES	
Chemical Base	Polycarboxylate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0.1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

Advantages

- Improves concrete's early and ultimate compressive and tensile strengths and impermeability to water.
- With its high range water reducing capabilities, enables concrete production with low water / cement ratio. Makes corrosion free concrete production possible.
- Enables concrete production with low water / cement ratio free of bleeding and segregation risks.
- Minimizes formwork striking time.
- Increases abrasion resistance of concrete by minimizing segregation and bleeding.
- Shortens application time of resin based flooring systems on fresh concrete.
- Increases freeze-thaw resistance of concrete.
- Easy placement of formwork saves energy from vibration labor.
- Easy setting to densely reinforced sections and impermeable concrete production with smooth surface finish.
- Enables early high strength concrete production in low temperatures.
- Compatible with all cement types.

Terms of Use

- **DEGASET AS 2000 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- **In Summer:** Degaset AS 2000 S
- **In Winter:** Degaset AS 2000 W
- **At Normal Temperature:** Degaset AS 2000

COMPLIANCE WITH STANDARDS	
Degaset AS 2000	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F
Degaset AS 2000 S	EN 934-2 Table 11.1-11.2 ASTM C 494 Type G
Degaset AS 2000 W	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F

Areas of Use

- Ready-mixed concrete production (with or without pump)
- Self-compacting concrete production
- Production of concrete that can easily set to densely reinforced concrete elements
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Injection and casting applications
- In precast and prefabricated production
- High performance concrete production



Consumption Dosage

DEGASET AS 2000 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **DEGASET AS 2000 SERIES** products should be added into the rest of water and should be mixed properly.

Compatibility with Other Admixtures

DEGASET AS 2000 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Retard Series
- Arset Doz Series
- Arset Waterproof Series
- Arset Friz Series
- Arset Zero Series
- Arset Fast Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **DEGASET AS 2000 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- | | |
|---|--|
| ■ DEGASET AS 2016 (DEGASET AS 2016 B) | ■ DEGASET AS 2445 CONS / 2445 S CONS / 2445 W CONS |
| ■ DEGASET AS 2025 | ■ DEGASET AS 2450 |
| ■ DEGASET AS 2182 | ■ DEGASET AS 2468 |
| ■ DEGASET AS 2207 | ■ DEGASET AS 2500 (DEGASET AX 729-1) |
| ■ DEGASET AS 2220 / 2220 R | ■ DEGASET AS 2500 S (DEGASET AX 729-1 S) |
| ■ DEGASET AS 2238 S | ■ DEGASET AS 2500 W (DEGASET AX 729-1 W) |
| ■ DEGASET AS 2255 / 2255 S | ■ DEGASET AS 2504 (DEGASET AX 729-4 S) |
| ■ DEGASET AS 2260 | ■ DEGASET AS 2544 |
| ■ DEGASET AS 2267 | ■ DEGASET AS 2703 / 2703 S / 2703 W |
| ■ DEGASET AS 2392 | ■ DEGASET AS 2850 / 2850 S / 2850 W |
| ■ DEGASET AS 2433 / 2433 S | ■ DEGASET AS 2955 |
| ■ DEGASET AS 2434 S (DEGASET AS 2433-5 S) | ■ DEGASET AS 2980 |
| ■ DEGASET AS 2435 (DEGASET AS 2433-5) | |

* In case of name change, the previous name of the product is shown in parenthesis.



DEGASET AS 3000 Series

High Water Reducing / New Generation Superplasticizer Concrete Admixtures

Product Description

DEGASET AS 3000 SERIES products are polycarboxylate polymer based high water reducing / new generation superplasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio.

Summer **(S)** type products have the feature of delaying setting (consistency protection) in hot weather. Winter **(W)** type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form **(CONS)**.

DEGASET AS 3000 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES	
Chemical Base	Polycarboxylate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0.1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

Advantages

- Improves concrete's early and ultimate compressive and tensile strengths and impermeability to water.
- With its high range water reducing capabilities, enables concrete production with low water / cement ratio. Makes corrosion free concrete production possible.
- Enables concrete production with low water / cement ratio free of bleeding and segregation risks.
- Minimizes formwork striking time.
- Increases abrasion resistance of concrete by minimizing segregation and bleeding.
- Shortens application time of resin based flooring systems on fresh concrete.
- Increases freeze-thaw resistance of concrete.
- Easy placement of formwork saves energy from vibration labor.
- Easy setting to densely reinforced sections and impermeable concrete production with smooth surface finish.
- Enables early high strength concrete production in low temperatures.
- Compatible with all cement types.

Terms of Use

- **DEGASET AS 3000 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

• In Summer: Degaset AS 3000 S • In Winter: Degaset AS 3000 W • At Normal Temperature: Degaset AS 3000

COMPLIANCE WITH STANDARDS	
Degaset AS 3000	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F
Degaset AS 3000 S	EN 934-2 Table 11.1-11.2 ASTM C 494 Type G
Degaset AS 3000 W	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F

Areas of Use

- Ready-mixed concrete production (with or without pump)
- Self-compacting concrete production
- Production of concrete that can easily set to densely reinforced concrete elements
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Injection and casting applications
- In precast and prefabricated production
- High performance concrete production



Consumption Dosage

DEGASET AS 3000 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **DEGASET AS 3000 SERIES** products should be added into the rest of water and should be mixed properly.

Compatibility with Other Admixtures

DEGASET AS 3000 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Doz Series
- Arset Friz Series
- Arset Fast Series
- Arset Retard Series
- Arset Waterproof Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **DEGASET AS 3000 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- DEGASET AS 3000 / 3000 S
- DEGASET AS 3001 (DEGASET AX 844 S)
- DEGASET AS 3004 (DEGASET AX 867)
- DEGASET AS 3004 S (DEGASET AX 867 S)
- DEGASET AS 3004 W (DEGASET AX 867 W)
- DEGASET AS 3005 (DEGASET AX GD 870)
- DEGASET AS 3642 W
- DEGASET AS 3714
- DEGASET AS 3846

* In case of name change, the previous name of the product is shown in parenthesis.



DEGASET AX 1000 Series

High Water Reducing / New Generation Superplasticizer Concrete Admixtures

Product Description

DEGASET AX 1000 SERIES products are polycarboxylate polymer based high water reducing / new generation superplasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio.

Summer **(S)** type products have the feature of delaying setting (consistency protection) in hot weather. Winter **(W)** type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form **(CONS)**.

TECHNICAL PROPERTIES	
Chemical Base	Polycarboxylate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

Advantages

- Improves concrete's early and ultimate compressive and tensile strengths and impermeability to water.
- With its high range water reducing capabilities, enables concrete production with low water / cement ratio. Makes corrosion free concrete production possible.
- Enables concrete production with low water / cement ratio free of bleeding and segregation risks.
- Minimizes formwork striking time.
- Increases abrasion resistance of concrete by minimizing segregation and bleeding.
- Shortens application time of resin based flooring systems on fresh concrete.
- Increases freeze-thaw resistance of concrete.
- Easy placement of formwork saves energy from vibration labor.
- Easy setting to densely reinforced sections and impermeable concrete production with smooth surface finish.
- Enables early high strength concrete production in low temperatures.
- Compatible with all cement types.

COMPLIANCE WITH STANDARDS	
Degaset AX 1000	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F
Degaset AX 1000 S	EN 934-2 Table 11.1-11.2 ASTM C 494 Type G
Degaset AX 1000 W	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F

Areas of Use

- Ready-mixed concrete production (with or without pump)
- Self-compacting concrete production
- Production of concrete that can easily set to densely reinforced concrete elements
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Injection and casting applications
- In precast and prefabricated production
- High performance concrete production

Terms of Use

- **DEGASET AX 1000 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- **In Summer:** Degaset AX 1000 S
- **In Winter:** Degaset AX 1000 W
- **At Normal Temperature:** Degaset AX 1000



Consumption Dosage

DEGASET AX 1000 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **DEGASET AX 1000 SERIES** products should be added into the rest of water and should be mixed properly.

Compatibility with Other Admixtures

DEGASET AX 1000 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Retard Series
- Arset Doz Series
- Arset Waterproof Series
- Arset Friz Series
- Arset Zero Series
- Arset Fast Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **DEGASET AX 1000 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

■ DEGASET AX 1453 S CONS / 1453 W CONS

■ DEGASET AX 1741 / 1741 W



DEGASET AX 2000 Series

High Water Reducing / New Generation Superplasticizer Concrete Admixtures

Product Description

DEGASET AX 2000 SERIES products are polycarboxylate polymer based high water reducing / new generation superplasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio.

Summer **(S)** type products have the feature of delaying setting (consistency protection) in hot weather. Winter **(W)** type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form **(CONS)**.

DEGASET AX 2000 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES	
Chemical Base	Modified polycarboxylate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0.1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

Advantages

- Improves concrete's early and ultimate compressive and tensile strengths and impermeability to water.
- With its high range water reducing capabilities, enables concrete production with low water / cement ratio. Makes corrosion free concrete production possible.
- Enables concrete production with low water / cement ratio free of bleeding and segregation risks.
- Minimizes formwork striking time.
- Increases abrasion resistance of concrete by minimizing segregation and bleeding.
- Shortens application time of resin based flooring systems on fresh concrete.
- Increases freeze-thaw resistance of concrete.
- Easy placement of formwork saves energy from vibration labor.
- Easy setting to densely reinforced sections and impermeable concrete production with smooth surface finish.
- Enables early high strength concrete production in low temperatures.
- Compatible with all cement types.

Terms of Use

- **DEGASET AX 2000 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- **In Summer:** Degaset AX 2000 S
- **In Winter:** Degaset AX 2000 W
- **At Normal Temperature:** Degaset AX 2000

COMPLIANCE WITH STANDARDS	
Degaset AX 2000	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F
Degaset AX 2000 S	EN 934-2 Table 11.1-11.2 ASTM C 494 Type G
Degaset AX 2000 W	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F

Areas of Use

- Ready-mixed concrete production (with or without pump)
- Self-compacting concrete production
- Production of concrete that can easily set to densely reinforced concrete elements
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Injection and casting applications
- In precast and prefabricated production
- High performance concrete production



Consumption Dosage

DEGASET AX 2000 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, DEGASET AX 2000 SERIES products should be added into the rest of water and should be mixed properly.

Compatibility with Other Admixtures

DEGASET AX 2000 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Retard Series
- Arset Doz Series
- Arset Waterproof Series
- Arset Friz Series
- Arset Zero Series
- Arset Fast Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **DEGASET AX 2000 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- | | |
|--|--|
| ■ DEGASET AX 2218 | ■ DEGASET AX 2504 |
| ■ DEGASET AX 2295 | ■ DEGASET AX 2514 |
| ■ DEGASET AX 2311 / 2311 S | ■ DEGASET AX 2519 |
| ■ DEGASET AX 2312 (DEGASET AX 2311-2) | ■ DEGASET AX 2522 / 2522 S |
| ■ DEGASET AX 2376 | ■ DEGASET AX 2522 SX (DEGASET AX 2522 S Extra) |
| ■ DEGASET AX 2424 (DEGASET AX 2424 E) | ■ DEGASET AX 2523 WX (DEGASET AX 2522-1 W Extra) |
| ■ DEGASET AX 2424 W | ■ DEGASET AX 2524 (DEGASET AX 2522 T) |
| ■ DEGASET AX 2434 (DEGASET AX 2433-5 / 2433-5 B) | ■ DEGASET AX 2530 S (DEGASET AX 2522-1 S Extra) |
| ■ DEGASET AX 2434 S (DEGASET AX 2433-5 S) | ■ DEGASET AX 2530 SX (DEGASET AX 2522-1 SX) |
| ■ DEGASET AX 2434 W (DEGASET AX 2433-5 W) | ■ DEGASET AX 2539 / 2539 W |
| ■ DEGASET AX 2447 / 2447 S | ■ DEGASET AX 2544 |
| ■ DEGASET AX 2448 (DEGASET AX 2447-1) | ■ DEGASET AS 2980 |
| ■ DEGASET AX 2448 S (DEGASET AX 2447-1 S) | |

* In case of name change, the previous name of the product is shown in parenthesis.



DEGASET AX 3000 Series

High Water Reducing / New Generation Superplasticizer Concrete Admixtures

Product Description

DEGASET AX 3000 SERIES products are polycarboxylate polymer based high water reducing / new generation superplasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio.

Summer **(S)** type products have the feature of delaying setting (consistency protection) in hot weather. Winter **(W)** type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form **(CONS)**.

DEGASET AX 3000 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES	
Chemical Base	Modified polycarboxylate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0.1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

Advantages

- Improves concrete's early and ultimate compressive and tensile strengths and impermeability to water.
- With its high range water reducing capabilities, enables concrete production with low water / cement ratio. Makes corrosion free concrete production possible.
- Enables concrete production with low water / cement ratio free of bleeding and segregation risks.
- Minimizes formwork striking time.
- Increases abrasion resistance of concrete by minimizing segregation and bleeding.
- Shortens application time of resin based flooring systems on fresh concrete.
- Increases freeze-thaw resistance of concrete.
- Easy placement of formwork saves energy from vibration labor.
- Easy setting to densely reinforced sections and impermeable concrete production with smooth surface finish.
- Enables early high strength concrete production in low temperatures.
- Compatible with all cement types.

Terms of Use

- **DEGASET AX 3000 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

• **In Summer:** Degaset AX 3000 S • **In Winter:** Degaset AX 3000 W • **At Normal Temperature:** Degaset AX 3000

COMPLIANCE WITH STANDARDS	
Degaset AX 3000	EN 934-2 Table 3.1 - 3.2 ASTM C 494 Type F
Degaset AX 3000 S	EN 934-2 Table 11.1-11.2 ASTM C 494 Type G
Degaset AX 3000 W	EN 934-2 Table 3.1 - 3.2 ASTM C 494 Type F

Areas of Use

- Ready-mixed concrete production (with or without pump)
- Self-compacting concrete production
- Production of concrete that can easily set to densely reinforced concrete elements
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Injection and casting applications
- In precast and prefabricated production
- High performance concrete production



Consumption Dosage

DEGASET AX 3000 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, DEGASET AX 3000 SERIES products should be added into the rest of water and should be mixed properly.

Compatibility with Other Admixtures

DEGASET AX 3000 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Retard Series
- Arset Doz Series
- Arset Waterproof Series
- Arset Friz Series
- Arset Zero Series
- Arset Fast Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. DEGASET AX 3000 SERIES products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- | | |
|----------------------------|---|
| ■ DEGASET AX 3000 W | ■ DEGASET AX 3400 |
| ■ DEGASET AX 3002 / 3002 S | ■ DEGASET AX 3437 |
| ■ DEGASET AX 3004 / 3004 S | ■ DEGASET AX 3448 |
| ■ DEGASET AX 3069 | ■ DEGASET AX 3512 / 3512 S / 3512 SX / 3512 W / 3512 WX |
| ■ DEGASET AX 3100 | ■ DEGASET AX 3513 S (DEGASET AX 3512-5 SX) |
| ■ DEGASET AX 3115 S | ■ DEGASET AX 3513 SX (DEGASET AX 3512 Sx Extra) |
| ■ DEGASET AX 3200 | ■ DEGASET AX 3520 / 3520 S |
| ■ DEGASET AX 3215 / 3215 S | ■ DEGASET AX 3562 / 3562 S |
| ■ DEGASET AX 3220 | ■ DEGASET AX 3600 / 3600 W |
| ■ DEGASET AX 3232 | ■ DEGASET AX 3778 / 3778 S / 3778 W |
| ■ DEGASET AX 3300 | ■ DEGASET AX 3987 / 3987 S / 3987 W |
| ■ DEGASET AX 3390 / 3390 S | |

* In case of name change, the previous name of the product is shown in parenthesis.



DEGASET AX 4000 Series

High Water Reducing / New Generation Superplasticizer Concrete Admixtures

Product Description

DEGASET AX 4000 SERIES products are polycarboxylate polymer based high water reducing / new generation superplasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio.

Summer **(S)** type products have the feature of delaying setting (consistency protection) in hot weather. Winter **(W)** type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form **(CONS)**.

DEGASET AX 4000 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES	
Chemical Base	Polycarboxylate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

Advantages

- Improves concrete's early and ultimate compressive and tensile strengths and impermeability to water.
- With its high range water reducing capabilities, enables concrete production with low water / cement ratio. Makes corrosion free concrete production possible.
- Enables concrete production with low water / cement ratio free of bleeding and segregation risks.
- Minimizes formwork striking time.
- Increases abrasion resistance of concrete by minimizing segregation and bleeding.
- Shortens application time of resin based flooring systems on fresh concrete.
- Increases freeze-thaw resistance of concrete.
- Easy placement of formwork saves energy from vibration labor.
- Easy setting to densely reinforced sections and impermeable concrete production with smooth surface finish.
- Enables early high strength concrete production in low temperatures.
- Compatible with all cement types.

Terms of Use

- **DEGASET AX 4000 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- In Summer: Degaset AX 4000 S
- In Winter: Degaset AX 4000 W
- At Normal Temperature: Degaset AX 4000

COMPLIANCE WITH STANDARDS	
Degaset AX 4000	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F
Degaset AX 4000 S	EN 934-2 Table 11.1-11.2 ASTM C 494 Type G
Degaset AX 4000 W	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F

Areas of Use

- Ready-mixed concrete production (with or without pump)
- Self-compacting concrete production
- Production of concrete that can easily set to densely reinforced concrete elements
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Injection and casting applications
- In precast and prefabricated production
- High performance concrete production



Consumption Dosage

DEGASET AX 4000 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, DEGASET AX 4000 SERIES products should be added into the rest of water and should be mixed properly.

Compatibility with Other Admixtures

DEGASET AX 4000 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Retard Series
- Arset Doz Series
- Arset Waterproof Series
- Arset Friz Series
- Arset Zero Series
- Arset Fast Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. DEGASET AX 4000 SERIES products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- DEGASET AX 4000 / 4000 S
- DEGASET AX 4004 CONS / 4004 S CONS
- DEGASET AX 4007 / 4007 S / 4007 W
- DEGASET AX 4008 (DEGASET AX 4007-3)
- DEGASET AX 4008 S (DEGASET AX 4007-3 S)
- DEGASET AX 4008 SX (DEGASET AX 4007-3 SX)
- DEGASET AX 4014 / 4014 W
- DEGASET AX 4025 (DEGASET AX 4025 KRT)
- DEGASET AX 4025 S (DEGASET AX 4025 KRT S)
- DEGASET AX 4025 W (DEGASET AX 4025 KRT W)
- DEGASET AX 4030 / 4030 S / 4030 SX / 4030 W
- DEGASET AX 4031 / 4031 S / 4031 W / 4031 WX
- DEGASET AX 4032 (DEGASET AX 4031 ÖZ)
- DEGASET AX 4032 S (DEGASET AX 4031 ÖZ-S)
- DEGASET AX 4033 (DEGASET AX 4031-5 KS)
- DEGASET AX 4033 W (DEGASET AX 4031-5 KS W)
- DEGASET AX 4035 (DEGASET AX 4035 ÖZ)
- DEGASET AX 4035 S (DEGASET AX 4035 ÖZ-S)
- DEGASET AX 4035 W (DEGASET AX 4035 ÖZ W)
- DEGASET AX 4036 S (DEGASET AX 4031 KS S)
- DEGASET AX 4040 A (ihale ürünü / ismi değişecek.)
- DEGASET AX 4040 İ (ihale ürünü / ismi değişecek.)
- DEGASET AX 4040 S-A (ihale ürünü / ismi değişecek.)
- DEGASET AX 4050 (DEGASET AX 4050 HS)
- DEGASET AX 4050 S (DEGASET AX 4050 HS S)
- DEGASET AX 4050 W (DEGASET AX 4050 HS W)
- DEGASET AX 4069 S
- DEGASET AX 4100 / 4100 S / 4100 SX
- DEGASET AX 4104 S / 4104 W
- DEGASET AX 4114 / 4114 W
- DEGASET AX 4120 (DEGASET AX 4121 CC)
- DEGASET AX 4120 W (DEGASET AX 4121 CC W)
- DEGASET AX 4121
- DEGASET AX 4122 (DEGASET AX 4121 N)
- DEGASET AX 4122 S (DEGASET AX 4121 NS)
- DEGASET AX 4123 (DEGASET AX 4123 Z)

* In case of name change, the previous name of the product is shown in parenthesis.



DEGASET AX 4000 Series

High Water Reducing / New Generation Superplasticizer Concrete Admixtures

Products of Series (Cont.)

- DEGASET AX 4123 W (DEGASET AX 4123 Z W)
- DEGASET AX 4123 S (DEGASET AX 4123 ZZ)
- DEGASET AX 4123 SX (DEGASET AX 4123 ZS)
- DEGASET AX 4124 / 4124 S / 4124 W
- DEGASET AX 4125 (DEGASET AX 4121 N-1)
- DEGASET AX 4126 (DEGASET AX 4121 N-75)
- DEGASET AX 4126 S (DEGASET AX 4121 N-75 S)
- DEGASET AX 4126 W (DEGASET AX 4121 N-75 W)
- DEGASET AX 4127 (DEGASET AX 4121 N-10)
- DEGASET AX 4128 (DEGASET AX 4121 N-13)
- DEGASET AX 4129 (DEGASET AX 4123-1 Z)
- DEGASET AX 4131 (DEGASET AX 4131 HS)
- DEGASET AX 4131 W (DEGASET AX 4031 HS W)
- DEGASET AX 4132
- DEGASET AX 4133 (DEGASET AX 4132-5)
- DEGASET AX 4134 (DEGASET AX 4135-2)
- DEGASET AX 4140 (DEGASET AX 4140 B)
- DEGASET AX 4141 S / 4141 W
- DEGASET AX 4148
- DEGASET AX 4154 (DEGASET AX 4153-2)
- DEGASET AX 4159 / 4159 W
- DEGASET AX 4180
- DEGASET AX 4187 (DEGASET AX 4186-5)
- DEGASET AX 4200 / 4200 W
- DEGASET AX 4203 / 4203 S / 4203 W
- DEGASET AX 4204 (DEGASET AX 4203 EXTRA)
- DEGASET AX 4204 W (DEGASET AX 4203 EXTRA W)
- DEGASET AX 4205 (DEGASET AX 4203-5 EXTRA)
- DEGASET AX 4205 W (DEGASET AX 4203-5 EXTRA W)
- DEGASET AX 4205 WX (DEGASET AX 4203-5 EXTRA WX)
- DEGASET AX 4207 S / 4207 W
- DEGASET AX 4217 S
- DEGASET AX 4230 S / 4230 W
- DEGASET AX 4235 / 4235 S / 4235 W
- DEGASET AX 4238 (DEGASET AX 4235-3)
- DEGASET AX 4255 / 4255 S / 4255 R
- DEGASET AX 4261 / 4261 S
- DEGASET AX 4280
- DEGASET AX 4300
- DEGASET AX 4307 / 4307 S / 4307 SX / 4307 W
- DEGASET AX 4308 (DEGASET AX 4307 K)
- DEGASET AX 4309 (DEGASET AX 4307-4)
- DEGASET AX 4321
- DEGASET AX 4331 / 4331 S / 4331 SX / 4331 W
- DEGASET AX 4335 S
- DEGASET AX 4338
- DEGASET AX 4343 / 4343 S / 4343 W / 4343 WX
- DEGASET AX 4355 / 4355 S / 4355 W
- DEGASET AX 4356 (DEGASET AX 4355 D)
- DEGASET AX 4357 / 4357 S
- DEGASET AX 4358 W (DEGASET AX 4355 MS / 4355 MS W)
- DEGASET AX 4359 W (DEGASET AX 4355-3 W)
- DEGASET AX 4364 / 4364 S / 4364 W
- DEGASET AX 4374 / 4374 S
- DEGASET AX 4400
- DEGASET AX 4402 (DEGASET AX 4402 Ç)
- DEGASET AX 4402 W (DEGASET AX 4402 Ç W)
- DEGASET AX 4407
- DEGASET AX 4416 (DEGASET AX 4416-2)
- DEGASET AX 4424 / 4424 S / 4424 W
- DEGASET AX 4427 SX
- DEGASET AX 4429 SX (DEGASET AX 4427-9 SX)
- DEGASET AX 4429 WX (DEGASET AX 4427-9 WX)
- DEGASET AX 4432
- DEGASET AX 4434 / 4434 W
- DEGASET AX 4444 / 4444 S / 4444 SX / 4444 W
- DEGASET AX 4445 (DEGASET AX 4444 ÇN)
- DEGASET AX 4450
- DEGASET AX 4451 (DEGASET AX 4450-2)
- DEGASET AX 4460 / 4460 S
- DEGASET AX 4463 / 4463 S / 4463 W
- DEGASET AX 4474 / 4474 S / 4474 W
- DEGASET AX 4475 (DEGASET AX 4474 F)
- DEGASET AX 4475 W (DEGASET AX 4474 WF)
- DEGASET AX 4476 (DEGASET AX 4474-2)
- DEGASET AX 4477 (DEGASET AX 4474-5 / DEGASET AX 4474-5 B)
- DEGASET AX 4477 S (DEGASET AX 4474-5 S)
- DEGASET AX 4477 W (DEGASET AX 4474-5 W)
- DEGASET AX 4507 / 4507 WX
- DEGASET AX 4515 (DEGASET AX 4510-69)
- DEGASET AX 4515 S (DEGASET AX 4510-6 S)
- DEGASET AX 4516
- DEGASET AX 4580
- DEGASET AX 4674
- DEGASET AX 4797 W
- DEGASET AX 4800
- DEGASET AX 4813 / 4813 S
- DEGASET AX 4848 / 4848 W / 4848 WX
- DEGASET AX 4872
- DEGASET AX 4891
- DEGASET AX 4950
- DEGASET AX 4965
- DEGASET AX 4967
- DEGASET AX 4993

* In case of name change, the previous name of the product is shown in parenthesis.

DEGASET AX 5000 Series

High Water Reducing / New Generation Superplasticizer Concrete Admixtures



DEGASET



Product Description

DEGASET AX 5000 SERIES products are polycarboxylate polymer based high water reducing / new generation superplasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio.

Summer **(S)** type products have the feature of delaying setting (consistency protection) in hot weather. Winter **(W)** type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form **(CONS)**.

DEGASET AX 5000 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES	
Chemical Base	Polycarboxylate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS	
Degaset AX 5000	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F
Degaset AX 5000 S	EN 934-2 Table 11.1-11.2 ASTM C 494 Type G
Degaset AX 5000 W	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F

Advantages

- Improves concrete's early and ultimate compressive and tensile strengths and impermeability to water.
- With its high range water reducing capabilities, enables concrete production with low water / cement ratio. Makes corrosion free concrete production possible.
- Enables concrete production with low water / cement ratio free of bleeding and segregation risks.
- Minimizes formwork striking time.
- Increases abrasion resistance of concrete by minimizing segregation and bleeding.
- Shortens application time of resin based flooring systems on fresh concrete.
- Increases freeze-thaw resistance of concrete.
- Easy placement of formwork saves energy from vibration labor.
- Easy setting to densely reinforced sections and impermeable concrete production with smooth surface finish.
- Enables early high strength concrete production in low temperatures.
- Compatible with all cement types.

Areas of Use

- Ready-mixed concrete production (with or without pump)
- Self-compacting concrete production
- Production of concrete that can easily set to densely reinforced concrete elements
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Injection and casting applications
- In precast and prefabricated production
- High performance concrete production

Terms of Use

- **DEGASET AX 5000 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- **In Summer:** Degaset AX 5000 S
- **In Winter:** Degaset AX 5000 W
- **At Normal Temperature:** Degaset AX 5000



DEGASET AX 5000 Series

High Water Reducing / New Generation Superplasticizer Concrete Admixtures

Consumption Dosage

DEGASET AX 5000 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **DEGASET AX 5000 SERIES** products should be added into the rest of water and should be mixed properly.

Compatibility with Other Admixtures

DEGASET AX 5000 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Doz Series
- Arset Friz Series
- Arset Fast Series
- Arset Retard Series
- Arset Waterproof Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **DEGASET AX 5000 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- DEGASET AX 5000
- DEGASET AX 5007 / 5007 S
- DEGASET AX 5008 (DEGASET AX 5007-1)
- DEGASET AX 5008 W (DEGASET AX 5007-1 W)
- DEGASET AX 5010
- DEGASET AX 5020
- DEGASET AX 5030
- DEGASET AX 5031 (DEGASET AX 5031 KRT)
- DEGASET AX 5031 S (DEGASET AX 5031 KRT S)
- DEGASET AX 5031 W (DEGASET AX 5031 KRT W)
- DEGASET AX 5040
- DEGASET AX 5100 / 5100 S / 5100 W
- DEGASET AX 5150 / 5150 S / 5150 W
- DEGASET AX 5151 (DEGASET AX 5150 B)
- DEGASET AX 5200
- DEGASET AX 5201 (DEGASET AX 5200-1)
- DEGASET AX 5201 S (DEGASET AX 5200-1 S)
- DEGASET AX 5201 W (DEGASET AX 5200-1 W)
- DEGASET AX 5202 W (DEGASET AX 5200-2 W)
- DEGASET AX 5202 WX (DEGASET AX 5200-2 WX)
- DEGASET AX 5266 / 5266 S / 5266 W
- DEGASET AX 5267
- DEGASET AX 5270 (DEGASET AX 5266-7)
- DEGASET AX 5280 (DEGASET AX 5300 R-2)
- DEGASET AX 5300 / 5300 S / 5300 SX / 5300 W / 5300 WX
- DEGASET AX 5301 (DEGASET AX 5300 R)
- DEGASET AX 5301 W (DEGASET AX 5300 RW)
- DEGASET AX 5302 (DEGASET AX 5300 RX)
- DEGASET AX 5303
- DEGASET AX 5303 SX (DEGASET AX 5310 S-1)
- DEGASET AX 5304 (DEGASET AX 5300 R-1)
- DEGASET AX 5306 (DEGASET AX 5300 BT)
- DEGASET AX 5307 (DEGASET AX 5300 BTA)
- DEGASET AX 5308 (DEGASET AX 5300 AS)
- DEGASET AX 5309 (DEGASET AX 5300 GMB)
- DEGASET AX 5309 S (DEGASET AX 5300 GMB S)

* In case of name change, the previous name of the product is shown in parenthesis.



Products of Series (Cont.)

- DEGASET AX 5309 W (DEGASET AX 5300 GMB W)
- DEGASET AX 5310 (DEGASET AX 5300-S)
- DEGASET AX 5310 S / 5310 W
- DEGASET AX 5315 W
- DEGASET AX 5320 / 5320 S / 5320 SX
- DEGASET AX 5330
- DEGASET AX 5335 S / 5335 W / 5335 WX
- DEGASET AX 5336 (DEGASET AX 5335 SK)
- DEGASET AX 5337 (DEGASET AX 5335 R)
- DEGASET AX 5338 (DEGASET AX 5335 R-2)
- DEGASET AX 5338 S / 5338 W
- DEGASET AX 5339 (DEGASET AX 5335-2)
- DEGASET AX 5340 (DEGASET AX 5335 HS)
- DEGASET AX 5345
- DEGASET AX 5350
- DEGASET AX 5390
- DEGASET AX 5400 (DEGASET AX 5400 C)
- DEGASET AX 5400 S
- DEGASET AX 5401 (DEGASET AX 5400 RX)
- DEGASET AX 5401 S / 5401 W
- DEGASET AX 5402 (DEGASET AX 5400 RN)
- DEGASET AX 5402 S (DEGASET AX 5400 RN S)
- DEGASET AX 5402 SX (DEGASET AX 5400 RN SX)
- DEGASET AX 5402 W (DEGASET AX 5400 RN W)
- DEGASET AX 5402 WX (DEGASET AX 5400 RN WX)
- DEGASET AX 5403 (DEGASET AX 5400 K)
- DEGASET AX 5403 S (DEGASET AX 5400 KS)
- DEGASET AX 5404
- DEGASET AX 5407 / 5407 S / 5407 W
- DEGASET AX 5428
- DEGASET AX 5435 (DEGASET AX 5335 R-10)
- DEGASET AX 5435 S (DEGASET AX 5335 R-10 S)
- DEGASET AX 5435 SX (DEGASET AX 5335 R-10 S EXTRA)
- DEGASET AX 5435 W (DEGASET AX 5335 R-10 W)
- DEGASET AX 5440 / 5440 S
- DEGASET AX 5450 / 5450 S
- DEGASET AX 5470 / 5470 W
- DEGASET AX 5500 / 5500 S / 5500 SX / 5500 W / 5500 WX
- DEGASET AX 5501 S (DEGASET AX 5500-1 S)
- DEGASET AX 5501 SX (DEGASET AX 5500 SXX)
- DEGASET AX 5501 W (DEGASET AX 5500-1 W)
- DEGASET AX 5600 / 5600 S / 5600 SX
- DEGASET AX 5601 SX (DEGASET AX 5600 SXX)
- DEGASET AX 5625 CONS
- DEGASET AX 5714
- DEGASET AX 5715 (DEGASET AX 5714-1)
- DEGASET AX 5715 W (DEGASET AX 5714-1 W)
- DEGASET AX 5836
- DEGASET AX 5850 S / 5850 SX / 5850 W
- DEGASET AX 5854 / 5854 S
- DEGASET AX 5890
- DEGASET AX 5909
- DEGASET AX 5910
- DEGASET AX 5960
- DEGASET AX 5967
- DEGASET AX 5968 / 5968 S
- DEGASET AX 5977

* In case of name change, the previous name of the product is shown in parenthesis.



DEGASET AX 6000 Series

High Water Reducing / New Generation Superplasticizer Concrete Admixtures

Product Description

DEGASET AX 6000 SERIES products are polycarboxylate polymer based high water reducing / new generation superplasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio.

Summer **(S)** type products have the feature of delaying setting (consistency protection) in hot weather. Winter **(W)** type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form **(CONS)**.

DEGASET AX 6000 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES	
Chemical Base	Polycarboxylate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

Advantages

- Improves concrete's early and ultimate compressive and tensile strengths and impermeability to water.
- With its high range water reducing capabilities, enables concrete production with low water / cement ratio. Makes corrosion free concrete production possible.
- Enables concrete production with low water / cement ratio free of bleeding and segregation risks.
- Minimizes formwork striking time.
- Increases abrasion resistance of concrete by minimizing segregation and bleeding.
- Shortens application time of resin based flooring systems on fresh concrete.
- Increases freeze-thaw resistance of concrete.
- Easy placement of formwork saves energy from vibration labor.
- Easy setting to densely reinforced sections and impermeable concrete production with smooth surface finish.
- Enables early high strength concrete production in low temperatures.
- Compatible with all cement types.

Terms of Use

- **DEGASET AX 6000 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- **In Summer:** Degaset AX 6000 S
- **In Winter:** Degaset AX 6000 W
- **At Normal Temperature:** Degaset AX 6000

COMPLIANCE WITH STANDARDS	
Degaset AX 6000	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F
Degaset AX 6000 S	EN 934-2 Table 11.1-11.2 ASTM C 494 Type G
Degaset AX 6000 W	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F

Areas of Use

- Ready-mixed concrete production (with or without pump)
- Self-compacting concrete production
- Production of concrete that can easily set to densely reinforced concrete elements
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- Injection and casting applications
- In precast and prefabricated production
- High performance concrete production



Consumption Dosage

DEGASET AX 6000 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **DEGASET AX 6000 SERIES** products should be added into the rest of water and should be mixed properly.

Compatibility with Other Admixtures

DEGASET AX 6000 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Retard Series
- Arset Doz Series
- Arset Waterproof Series
- Arset Friz Series
- Arset Zero Series
- Arset Fast Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **DEGASET AX 6000 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- DEGASET AX 6000 / 6000 W
- DEGASET AX 6001 (DEGASET AX 6000 KYB)
- DEGASET AX 6010
- DEGASET AX 6020
- DEGASET AX 6400
- DEGASET AX 6500
- DEGASET AX 6581
- DEGASET AX 6850

* In case of name change, the previous name of the product is shown in parenthesis.



DEGASET PC 7000 Series

High Water Reducing / New Generation Superplasticizer Concrete Admixtures

Product Description

DEGASET PC 7000 SERIES products are polycarboxylate polymer based high water reducing / new generation superplasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio.

Summer **(S)** type products have the feature of delaying setting (consistency protection) in hot weather. Winter **(W)** type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form **(CONS)**.

TECHNICAL PROPERTIES	
Chemical Base	Polycarboxylate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS	
Degaset PC 7000	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F
Degaset PC 7000 S	EN 934-2 Table 11.1-11.2 ASTM C 494 Type G
Degaset PC 7000 W	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F

Advantages

- Improves concrete's early and ultimate compressive and tensile strengths and impermeability to water.
- With its high range water reducing capabilities, enables concrete production with low water / cement ratio. Makes corrosion free concrete production possible.
- Enables concrete production with low water / cement ratio free of bleeding and segregation risks.
- Minimizes formwork striking time.
- Increases abrasion resistance of concrete by minimizing segregation and bleeding.
- Shortens application time of resin based flooring systems on fresh concrete.
- Increases freeze-thaw resistance of concrete.
- Easy placement of formwork saves energy from vibration labor.
- Easy setting to densely reinforced sections and impermeable concrete production with smooth surface finish.
- Enables early high strength concrete production in low temperatures.
- Compatible with all cement types.

Areas of Use

- Precast and precast concrete production
- Self-compacting and compacted concrete production
- In the production of prestressed concrete with low water / cement ratio
- In wet shotcrete production
- In places that need to stay early
- In the production of concrete that can be easily placed in densely reinforced concrete elements
- In the production of all kinds of light or normal weight concrete, with or without reinforcement
- In the production of high performance concrete
- R.P.C concrete production

Terms of Use

- **DEGASET PC 7000 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- **In Summer:** Degaset PC 7000 S
- **In Winter:** Degaset PC 7000 W
- **At Normal Temperature:** Degaset PC 7000



Consumption Dosage

DEGASET PC 7000 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **DEGASET PC 7000 SERIES** products should be added into the rest of water and should be mixed properly.

Compatibility with Other Admixtures

DEGASET PC 7000 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Doz Series
- Arset Friz Series
- Arset Fast Series
- Arset Retard Series
- Arset Waterproof Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **DEGASET PC 7000 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- DEGASET PC 7010 (DEGASET PC 10)
- DEGASET PC 7033 CONS
- DEGASET PC 7034 CONS (DEGASET PC 7033-1 CONS)
- DEGASET PC 7070
- DEGASET PC 7500 / 7500 W
- DEGASET PC 7555

* In case of name change, the previous name of the product is shown in parenthesis.



DEGASET PC 8000 Series

High Water Reducing / New Generation Superplasticizer Concrete Admixtures

Product Description

DEGASET PC 8000 SERIES products are polycarboxylate polymer based high water reducing / new generation superplasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio.

Summer **(S)** type products have the feature of delaying setting (consistency protection) in hot weather. Winter **(W)** type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form **(CONS)**.

DEGASET PC 8000 SERIES products have more water cutting and consistency protection features compared to other sub-series groups

TECHNICAL PROPERTIES	
Chemical Base	Polycarboxylate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

Advantages

- Improves concrete's early and ultimate compressive and tensile strengths and impermeability to water.
- With its high range water reducing capabilities, enables concrete production with low water / cement ratio. Makes corrosion free concrete production possible.
- Enables concrete production with low water / cement ratio free of bleeding and segregation risks.
- Minimizes formwork striking time.
- Increases abrasion resistance of concrete by minimizing segregation and bleeding.
- Shortens application time of resin based flooring systems on fresh concrete.
- Increases freeze-thaw resistance of concrete.
- Easy placement of formwork saves energy from vibration labor.
- Easy setting to densely reinforced sections and impermeable concrete production with smooth surface finish.
- Enables early high strength concrete production in low temperatures.
- Compatible with all cement types.

Terms of Use

- **DEGASET PC 8000 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- In Summer: Degaset PC 8000 S
- In Winter: Degaset PC 8000 W
- At Normal Temperature: Degaset PC 8000

COMPLIANCE WITH STANDARDS	
Degaset PC 8000	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F
Degaset PC 8000 S	EN 934-2 Table 11.1-11.2 ASTM C 494 Type G
Degaset PC 8000 W	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F

Areas of Use

- Precast and precast concrete production
- Self-compacting and compacted concrete production
- In the production of prestressed concrete with low water / cement ratio
- In wet shotcrete production
- In places that need to stay early
- In the production of concrete that can be easily placed in densely reinforced concrete elements
- In the production of all kinds of light or normal weight concrete, with or without reinforcement
- In the production of high performance concrete
- R.P.C concrete production



Consumption Dosage

DEGASET PC 8000 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **DEGASET PC 8000 SERIES** products should be added into the rest of water and should be mixed properly.

Compatibility with Other Admixtures

DEGASET PC 8000 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Doz Series
- Arset Friz Series
- Arset Fast Series
- Arset Retard Series
- Arset Waterproof Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **DEGASET PC 8000 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- | | |
|---|-------------------|
| ■ DEGASET PC 8000 | ■ DEGASET PC 8210 |
| ■ DEGASET PC 8040 | ■ DEGASET PC 8620 |
| ■ DEGASET PC 8200 / 8200 CONS / 8200 S / 8200 SX / 8200 W | ■ DEGASET PC 8650 |
| ■ DEGASET PC 8201 (DEGASET PC 8200 N) | ■ DEGASET PC 8655 |

* In case of name change, the previous name of the product is shown in parenthesis.



DEGASET PC 9000 Series

High Water Reducing / New Generation Superplasticizer Concrete Admixtures

Product Description

DEGASET PC 9000 SERIES products are polycarboxylate polymer based high water reducing / new generation superplasticizer concrete additives used to increase the workability and mechanical properties of concrete by reducing the water / cement ratio.

Summer **(S)** type products have the feature of delaying setting (consistency protection) in hot weather. Winter **(W)** type allows concrete casting in cold weather conditions. In addition, the products in this product group are also available in concentrated form **(CONS)**.

DEGASET PC 9000 SERIES products have more water cutting and consistency protection features compared to other sub-series groups.

TECHNICAL PROPERTIES	
Chemical Base	Polycarboxylate based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

Advantages

- Improves concrete's early and ultimate compressive and tensile strengths and impermeability to water.
- With its high range water reducing capabilities, enables concrete production with low water / cement ratio. Makes corrosion free concrete production possible.
- Enables concrete production with low water / cement ratio free of bleeding and segregation risks.
- Minimizes formwork striking time.
- Increases abrasion resistance of concrete by minimizing segregation and bleeding.
- Shortens application time of resin based flooring systems on fresh concrete.
- Increases freeze-thaw resistance of concrete.
- Easy placement of formwork saves energy from vibration labor.
- Easy setting to densely reinforced sections and impermeable concrete production with smooth surface finish.
- Enables early high strength concrete production in low temperatures.
- Compatible with all cement types.

Terms of Use

- **DEGASET PC 9000 SERIES** products are recommended to be added to the mixing water in ready-mixed concrete production plants. It should not be added directly to the dry mixture.
- If it is added directly to fresh concrete, the mixing time should be extended for at least 1-2 minutes at fast speed to ensure sufficient homogeneity or this time should be determined in laboratory trials.
- When more additives are used than the specified range of use, it may affect the setting time of the concrete. In such cases, a preliminary test should be done in the laboratory.

Usage according to weather conditions;

- In Summer: Degaset PC 9000 S
- In Winter: Degaset PC 9000 W
- At Normal Temperature: Degaset PC 9000

COMPLIANCE WITH STANDARDS	
Degaset PC 9000	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F
Degaset PC 9000 S	EN 934-2 Table 11.1-11.2 ASTM C 494 Type G
Degaset PC 9000 W	EN 934-2 Table 3.1 – 3.2 ASTM C 494 Type F

Areas of Use

- Precast and precast concrete production
- Self-compacting and compacted concrete production
- In the production of prestressed concrete with low water / cement ratio
- In wet shotcrete production
- In places that need to stay early
- In the production of concrete that can be easily placed in densely reinforced concrete elements
- In the production of all kinds of light or normal weight concrete, with or without reinforcement
- In the production of high performance concrete
- R.P.C concrete production



Consumption Dosage

DEGASET PC 9000 SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, **DEGASET PC 9000 SERIES** products should be added into the rest of water and should be mixed properly.

Compatibility with Other Admixtures

DEGASET PC 9000 SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Retard Series
- Arset Doz Series
- Arset Waterproof Series
- Arset Friz Series
- Arset Zero Series
- Arset Fast Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **DEGASET PC 9000 SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- DEGASET PC 9000
- DEGASET PC 9040
- DEGASET PC 9200

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ARSET



ITARY PRODUCTS

ARSET Series Products are Special Concrete Admixtures and Complementary Products. These concrete admixtures and complementary products are used for special purposes in ready-mixed concrete, precast concrete production and large scale construction projects.

ARSET



- Set Accelerating Admixtures
- Set Retarder Admixtures
- Air-entraining Admixtures
- Antifreeze Concrete Admixtures
- Re-dosing Admixtures
- Zero-slump Concrete Admixtures
- Early Strength Increasing Additives
- Surface Retarding Admixtures
- Waterproofing Admixtures
- Curing Compounds
- Shotcrete Admixtures
- Alkali-Silica Reaction Controlling Admixtures
- Corrosion Inhibiting Admixtures
- Pumping Aids
- Underwater Concrete Admixtures
- Concrete Remover Chemicals
- Mould Releasing Agents



		PAGE NO	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110	111
		PRODUCTS	ARSET FAST SERIES	ARSET RETARD SERIES	ARSET AIR SERIES	ARSET FRIZ SERIES	ARSET DOZ SERIES	ARSET ZERO SERIES	ARSET SA 40	ARSET SURFACE SERIES	ARSET WATERPROOF SERIES	ARSET KUR SERIES	ARSET SHOT SERIES	ARSET STOP ASR	ARSET CORROSTOP	ARSET PUMP	ARSET VISCO SERIES	ARSET REMOVER SERIES	ARSET LUB SERIES
USAGE AREAS	Ready-mixed Concrete Production																		
	Precast Concrete Production																		
	Self Leveling Concrete Production																		
	Shotcrete Production												■						
	Zero-slump Concrete Production						■												
	Aggregate Looking Concrete (Wash Concrete) Production									■									
	Pouring Concrete in Hot Weather		■																
	Pouring Concrete in Cold Weather	■				■													
PURPOSE OF USAGE	Slump Retarding		■																
	Set Acceleration ⁽¹⁾	■				■													
	Set Retarder ⁽²⁾		■																
	Early High Strength							■											
	Final High Strength							■											
	Waterproofing										■								
	Increasing The Hydration Temperature of Concrete and Preventing Freezing	■				■													
	Air-entraining			■															
	Set Retarder in Concrete Surface									■									
	Re-dosing the Consistency of Concrete					■													
	Accelerate Hardening	■																	
	Alkali-Silica Reaction (ASR)													■					
	Corrosion Inhibitor														■				
	Pumping Aid															■			

1- Winter versions (W)

2- Summer versions (S)



ARSET FAST Series

Set Accelerating Admixtures

Product Description

ARSET FAST SERIES products are concrete and mortar admixture that provides early setting by accelerating hydration. Increases early strength of concrete without negatively affecting final strength.

TECHNICAL PROPERTIES	
Chemical Base	Organic-Inorganic material mixtures
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10,0 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS	
Arset Fast Series	TS EN 934-2

Advantages

- Depending on the cement type and concrete temperature, it significantly increases early strength of concrete in the first 24 hours.
- It accelerates the hydration reaction of cement in cold weather and provides concrete to set early.
- Reduces mold release time.
- Protects concrete from freezing.
- Does not contain chloride or any other components that will result in corrosion of the reinforcement. Suitable for use in any reinforced concrete structures.
- Do not contain chloride or any other components that result in corrosion in the reinforcements. Therefore, it is suitable for use in reinforced concrete structures.

Areas of Use

- For concrete production where very high early strength is required
- Concrete production in cold weather
- Where frost effect is expected
- When sudden temperature drop is expected
- Multi-reinforced concrete
- In ready-mix concrete, in pouring precast and prefabricated concrete
- Where it is necessary to mold early or load the molds quickly
- It can be used in combination with normal and superplasticizers however using in combination with admixtures that have retarding effect is not recommended

Terms of Use

When pouring concrete in cold weather, the following issues should be considered:

- Aggregate, water and cement should be stored under suitable conditions to prevent the effects of cold.
- Instead of blended cement, cements with high clinker ratio should be preferred.
- The formwork and reinforcement should be protected against water, snow and icing. If necessary, ice and water should be removed by heating before concrete casting.
- Molds should be isolated.
- Fresh concrete temperature should be at least 5-15 °C. Concrete should be covered to prevent heat and moisture loss and should be well protected until it reaches 4-5 N/mm² pressure resistance.
- **ARSET FAST SERIES** products must not be used with set retarder admixtures (Arset Retard Series).

Consumption Dosage

ARSTEP FAST SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

ARSET FAST SERIES products may be added with the mixing water or simultaneously during the mixing water is introduced to the concrete. It can also be added to the fresh ready mix concrete at the concrete plant or construction site.



Compatibility with Other Admixtures

ARSTEP FAST SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arstep / Arstep Extra / Degaset Series admixtures
- Arset Air Series
- Arset Doz
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing slowly at low speed with mechanical methods before using the product.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSET DOZ SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- ARSET FAST 2
- ARSET FAST 3 (ARSET FAST ZX)
- ARSET FAST 6 / FAST 6 CONS
- ARSET FAST 7

* In case of name change, the previous name of the product is shown in parenthesis.



ARSET RETARD Series

Set Retarder Admixtures

Product Description

ARSET RETARD SERIES products are a set retarding concrete and mortar admixtures.

TECHNICAL PROPERTIES	
Chemical Base	Organic-Inorganic material mixtures
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10,0 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS	
Arset Retard Series	TS EN 934-2 Table 8 ASTM C 494 Type B

Advantages

- Ensures controlled prolongation of setting of concrete.
- Does not have adverse effects on final strengths.
- Reduces creeping and contraction.
- Increases workability.
- Minimizes the effects of temperature.
- Reduces segregation and bleeding of concrete.
- Ensures easy pumping.
- Prevents the concrete from losing its viscosity fast, provides for extended viscosity protection depending on the type of cement used.
- Prevents shrinkage cracks that may result from high hydration temperatures.
- Do not contain chloride or any other components that result in corrosion in the reinforcements. Therefore, it is suitable for use in reinforced concrete structures.

Areas of Use

- In case the concrete is transported over a long distance; in case of pouring large volumes of concrete (mass concrete) and preventing cold joints
- In high temperature concrete casting
- In long-wait concrete casting
- In thin-reinforced reinforced concrete productions with placement difficulties
- In the production of concrete where impermeability is required
- It is used in places that will be subject to vibration again
- It is used to compensate the loss of consistency in hot, windy and humid weather

Terms of Use

- Concrete components may differ by their structures. The admixture to be added into the mixture to prevent segregation of the concrete should be applied in the suitable doses. Prior tests should be performed to check whether the admixture is suitable for the design of a certain concrete.
- In case of using the admixture in the amount exceeding the specified use range, the setting time of the concrete may be prolonged. In such cases, the concrete should be kept humid to allow for curing until it hardens.
- **ARSET RETARD SERIES** products must not be used with setting / hardening accelerator admixtures (Arset Fast Series or Arset Friz Series).

Consumption Dosage

ARSTEP RETARD SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

ARSET RETARD SERIES products may be added with the mixing water or simultaneously during the mixing water is introduced to the concrete. It can also be added to the fresh ready mix concrete at the concrete plant or construction site.

Compatibility with Other Admixtures

ARSTEP RETARD SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arstep / Arstep Extra / Degaset Series admixtures
- Arset Air Series
- Arset Doz
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing slowly at low speed with mechanical methods before using the product.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSET RETARD SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

■ ARSET RETARD

■ ARSET YAPITEKS 67



ARSET AIR Series

Air-entraining Admixtures

Product Description

ARSET AIR SERIES products are an air-entraining admixture for concrete. It is used for workable and durable concrete production in order to protect the concrete against freeze-thaw effects.

TECHNICAL PROPERTIES	
Chemical Base	Surface active agents
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10,0 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS	
Arset Air Series	TS EN 934-2 Table 5 ASTM C 260

Advantages

- Improves workability.
- Increases freeze-thaw resistance.
- Increases resistance of concrete against de-icing salt.
- Increases durability.
- Decreases water quantity without loss of workability.
- Reduces the risk of segregation.
- Improves cohesion.
- It has no positive or negative effects on setting of concrete.
- Do not contain chloride or any other components that result in corrosion in the reinforcements. Therefore, it is suitable for use in reinforced concrete structures.

Areas of Use

- Airports, runways and taxiways
- Concrete roads
- Dams and water tanks
- Freeze-thaw resistant concrete production
- Lightweight hollow concrete production
- Mass concrete pouring structures
- In ready mixed concrete

Terms of Use

- It is suitable for use with all types of concrete with or without additives.
- It is used with air entrainment to increase its freeze-thaw resistance.
- The amount and type of aggregate used, cement dosage, cement type, fineness, consistency, water / cement ratio and temperature may negatively affect the amount of air; in such cases, the additive dose may need to be increased.
- Avoid evaporation of the mixing water in the concrete at high temperatures. During the curing phase, curing can be used to prevent rapid evaporation of moisture in the concrete and crack formation.
- Steel, polypropylene and organic fibers can be used against shrinkage cracks.
- It is recommended to carry out tests before using the products.

Consumption Dosage

ARSTEP AIR SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

ARSET AIR SERIES products are used by adding the mixing water before it is added to the aggregate. It should not be added over the dry mixture. When used with other additives, each additive must be added to the mix individually.



Compatibility with Other Admixtures

ARSTEP AIR SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arstep / Arstep Extra / Degaset series admixtures
- Arset Friz Series
- Arset Fast Series
- Arset Retard Series
- Arset Doz Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing slowly at low speed with mechanical methods before using the product.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSET AIR SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet.

Products of Series

- ARSET AIR

- ARSET AIR L



ARSET FRIZ Series

Antifreeze Concrete Admixtures

Product Description

ARSET FRIZ SERIES products are antifreeze concrete admixture that protects the concrete from freezing and ensures high-quality pouring of concrete where it is necessary to postpone pouring the concrete due to cold weather and risk of frost.

TECHNICAL PROPERTIES	
Chemical Base	Special salt based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10,0 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS	
Arset Friz Series	TS EN 934-2 Table 6 ASTM C 494 Type C

Advantages

- Accelerates setting time of concrete by accelerating hydration reaction of cement in cold weather.
- In order to prevent freezing, it enables the concrete to reach its minimum compressive strength (4-5 N / mm²) rapidly.
- Do not contain chloride or any other components that result in corrosion in the reinforcements. Therefore, it is suitable for use in reinforced concrete structures.

Areas of Use

- For concrete production where very high early strength is required
- Concrete production in cold weather
- Where frost effect is expected
- When sudden temperature drop is expected
- Multi-reinforced concrete
- In ready-mix concrete, in pouring precast and prefabricated concrete
- Where it is necessary to mold early or load the molds quickly
- It can be used in combination with normal and superplasticizers however using in combination with admixtures that have retarding effect is not recommended

Terms of Use

When pouring concrete in cold weather, the following issues should be considered:

- Aggregate, water and cement should be stored under suitable conditions to prevent the effects of cold.
- Instead of blended cement, cements with high clinker ratio should be preferred.
- The formwork and reinforcement should be protected against water, snow and icing. If necessary, ice and water should be removed by heating before concrete casting.
- Molds should be isolated.
- Fresh concrete temperature should be at least 5-15 °C. Concrete should be covered to prevent heat and moisture loss and should be well protected until it reaches 4-5 N/mm² pressure resistance.
- **ARSET FRIZ SERIES** products must not be used with set retarder admixtures (Arset Retard Series).
- Depends on the cement and aggregate used, ambient temperature and the mixture ratio, and the setting speeds up depending on the dosage applied.
- Since hydration stops at temperatures lower than -5°C, the concrete should not left to set but protected using suitable curing methods until it achieves adequate strength (minimum 5 N/mm² on average).

Consumption Dosage

ARSTEP FRIZ SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.



Method of Application

ARSET FRIZ SERIES products may be added with the mixing water or simultaneously during the mixing water is introduced to the concrete. It can also be added to the fresh ready mix concrete at the concrete plant or construction site.

Compatibility with Other Admixtures

ARSTEP FRIZ SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arstep / Arstep Extra / Degaset Series admixtures
- Arset Air Series
- Arset Doz Series
- Arset Proof Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing slowly at low speed with mechanical methods before using the product.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSET FRIZ SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- | | |
|--|------------------|
| ■ ARSET FRIZ 100 / FRIZ 100 M / FRIZ 100 L / FRIZ 100 CONS | ■ ARSET FRIZ 215 |
| ■ ARSET FRIZ 150 | ■ ARSET FRIZ 250 |
| ■ ARSET FRIZ 200 | ■ ARSET FRIZ 300 |
| ■ ARSET FRIZ 210 | ■ ARSET FRIZ 500 |



ARSET DOZ Series

Re-dosing Concrete Admixtures

Product Description

ARSET DOZ SERIES products are a concrete consistency regulating re-dosing admixture that is mixed to concrete on site to improve pumpability and placing of concrete with low consistency.

TECHNICAL PROPERTIES	
Chemical Base	Polymer based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10,0 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS	
Arset Doz Series	TS EN 934-2

Advantages

- Improves workability of concrete with low consistency.
- Ensures workability of concrete by increasing the lost viscosity without addition of water
- Prevents strength loss of concrete.
- Shortens pumping time.
- By improving concrete consistency, it makes pumpability possible.
- Do not contain chloride or any other components that result in corrosion in the reinforcements. Therefore, it is suitable for use in reinforced concrete structures.

Areas of Use

- Ready mix concrete and in pouring precast concrete
- In eliminating loss of viscosity due to hot, windy and humid weather
- In pouring concrete with a long period of delay

Terms of Use

ARSET DOZ SERIES products used by directly mixing into the concretes which has difficulty compacting due to loss of viscosity.

Consumption Dosage

ARSTEP DOZ SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

ARSET DOZ SERIES products used by directly mixing into the concretes which has difficulty compacting due to loss of viscosity. After the admixture is added to the concrete, further mixing within the truck mixer obtaining at the maximum speed (~15 rpm) for 3 minutes is required for homogenous mixture. After adding **ARSET DOZ** upon validating by slump testing and observation, if the required slump level is obtained concrete pumping can be started.

Compatibility with Other Admixtures

ARSTEP DOZ SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arstep / Arstep Extra / Degaset Series admixtures
- Arset Air Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container



Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing slowly at low speed with mechanical methods before using the product.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSET DOZ SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- | | |
|----------------|-----------------|
| ■ ARSET DOZ 12 | ■ ARSET DOZ 58 |
| ■ ARSET DOZ 34 | ■ ARSET DOZ 59 |
| ■ ARSET DOZ 35 | ■ ARSET DOZ 81 |
| ■ ARSET DOZ 44 | ■ ARSET DOZ 82 |
| ■ ARSET DOZ 48 | ■ ARSET DOZ 85 |
| ■ ARSET DOZ 39 | ■ ARSET DOZ 89 |
| ■ ARSET DOZ 50 | ■ ARSET DOZ 100 |
| ■ ARSET DOZ 55 | ■ ARSET DOZ 110 |



ARSET ZERO Series

Zero-slump Concrete Admixtures

Product Description

ARSET ZERO SERIES products are a compaction aid for semi-dry, no slump concrete.

TECHNICAL PROPERTIES	
Chemical Base	Modified polymer based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10,0 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS	
Arset Zero Series	TS EN 934-2

Advantages

- Improved surface finish.
- Homogenous distribution of cement, mineral additives and pigments.
- Decreases friction between the concrete and the mould.
- Increases mould filling speed.
- Shortens compaction time.
- Reduces stickiness between concrete top surface and compaction equipment.
- Increases freeze-thaw stability.
- Increases initial and ultimate compressive and tensile strength.
- Increases concrete stability and service life.
- Enables a more economic concrete production.
- Increases productivity.
- Do not contain chloride or any other components that result in corrosion in the reinforcements. Therefore, it is suitable for use in reinforced concrete structures.

Areas of Use

- Paving stone production
- Curbstones
- Concrete tiles
- Building blocks and bricks
- Garden and landscaping elements

Terms of Use

- Concrete mix design and admixture dosage should be determined by laboratory tests according to the concrete class and properties.
- It should not be used in flowable concrete production. It may cause excessive air entrainment and loss of strength of concrete.

Consumption Dosage

ARSTEP ZERO SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

Aggregates and the binder (cement-silica fume-fly ash-blast furnace slag) should be mixed until obtaining a homogenous mixture. After adding 70% of mixing water into the dry mixture, ARSTEP ZERO SERIES products should be added into the rest of water and should be mixed properly.



Compatibility with Other Admixtures

ARSTEP ZERO SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air Series
- Arset Doz Series
- Arset Fast Series
- Arset Friz
- Arset Retard Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing slowly at low speed with mechanical methods before using the product.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSET ZERO SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- | | |
|--|--|
| <ul style="list-style-type: none"> ■ ARSET ZERO 60 ■ ARSET ZERO 90 ■ ARSET ZERO 100 ■ ARSET ZERO 250 | <ul style="list-style-type: none"> ■ ARSET ZERO 251 (ARSET ZERO 250-1) ■ ARSET ZERO 255 W (ARSET ZERO 250-5 W) ■ ARSET ZERO 300 ■ ARSET ZERO 500 |
|--|--|

* In case of name change, the previous name of the product is shown in parenthesis.



ARSET SA 40

Early Strength Increasing Additive

Product Description

ARSET SA 40 is used as an accelerator additive in concrete chemicals. It increases early strength without adversely affecting the final strength of concrete.

TECHNICAL PROPERTIES	
Chemical Base	Sulfoamine based
Color / Appearance	Brown liquid
pH	10,50 - 12,50
Density	1,21 ± 0,03 g/cm ³
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10,0 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS	
Arset SA 40	TS EN 934-2

Advantages

- It is used with normal and superplasticizers. However, it is not recommended to be used with additives that have a retarding effect.
- Depending on the cement type and the temperature of the product, it significantly increases the early strength of the material in the first 24 hours.
- Do not contain chloride or any other components that result in corrosion in the reinforcements. Therefore, it is suitable for use in reinforced concrete structures.

Areas of Use

- In the production of concrete and mortar where early high strength is required
- Concrete and mortar applications in cold weather conditions
- In cement and gypsum-based products where early strength is required

Terms of Use

Concrete mix design and admixture dosage should be determined by laboratory tests according to the concrete class and properties.

Consumption Dosage

It is used at a ratio of 1.0-2.5% of the total mass. Optimum utilization rate should be determined according to laboratory trials.

Method of Application

ARSET SA 40 can be added to the mixing water or added to fresh concrete before discharge at the construction site. In this case, it will be sufficient to extend the mixing time for 1-2 minutes in order for the concrete mixture to be homogeneous.

Compatibility with Other Admixtures

ARSET SA 40 can be combined with the following admixtures. Laboratory tests should be carried out before use.

- | | |
|-------------------------|---------------------|
| ■ Arstep / Arstep Extra | ■ Arset Air Series |
| ■ / Degaset Series | ■ Arset Doz |
| ■ Admixtures | ■ Arset Zero Series |

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container



Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing slowly at low speed with mechanical methods before using the product.

Some subsidence may occur during long-term storage. In this case, the product can be used by filtering.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSET SA 40** is not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).



ARSET SURFACE Series

Surface Retarding Admixtures

Product Description

ARSET SURFACE SERIES is water based, single component, solvent free surface retarder, used for exposed aggregate concrete production.

TECHNICAL PROPERTIES	
Chemical Base	Organic material based
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10,0 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS	
Arset Surface Series	TS EN 934-2

Advantages

- It delays the hydration of the cement on the concrete surface.
- It reduces the roughening labor costs. It is easy to apply.
- Does not contain solvent.
- It can be diluted according to the application purpose.
- Do not contain chloride or any other components that result in corrosion in the reinforcements. Therefore, it is suitable for use in reinforced concrete structures.

Areas of Use

- It is used in architectural applications (wash concrete, exposed aggregate concrete) where an aggregate-looking surface is required in precast or on-site concrete
- It is used to roughen fresh concrete surfaces in horizontal construction joints
- It is easier to apply than physical etching (sandblasting, notching, chipping, etc.)
- It provides an important convenience for screed or liquid applications

Consumption Dosage

The usage dosage of **ARSET SURFACE SERIES** products should be determined according to the roughness and absorbency of the mold, the desired dilution rate and roughening depth.

Method of Application

- The depth of the retarded layer depends on the amount of product applied, the time until the retarder is removed from the surface, the amount of water and cement in the mixture and the ambient temperature.
- It can be applied with a brush, roller or spray equipment.
- It should be used in clean molds.
- It can be diluted with clean water at a ratio between 1: 1 and 1: 3 (1 part product: 3 parts water) depending on the desired effect.
- When working with molds made of highly absorbent material, at least 2 layers should be applied.
- If the product is to be applied to the concrete surface, it should be applied before the first setting of the newly poured concrete after the perspiration water is removed from the surface.
- If the product is applied to the mold surface, the concrete should be poured into the mold immediately after the application.
- It should be protected from rain and frost.
- Depending on the ambient temperature and curing conditions, the molds should be opened as soon as possible, washed with pressurized water and brushed when necessary.



Compatibility with Other Admixtures

ARSTEP SURFACE SERIES can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arstep / Arstep Extra / Degaset Series Admixtures
- Arset Air Series
- Arset Doz
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing slowly at low speed with mechanical methods before using the product.

Some subsidence may occur during long-term storage. In this case, the product can be used by filtering.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSET SURFACE SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

■ ARSET SURFACE

■ ARSET SURFACE H



ARSET WATERPROOF Series

Waterproofing Admixtures

Product Description

ARSET WATERPROOF SERIES products are waterproof additives specially developed for concrete.

TECHNICAL PROPERTIES	
Chemical Base	Organic-Inorganic material mixtures
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10,0 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS	
Arset Waterproof Series	TS EN 934-2

Advantages

- Use all types of cements.
- Improves workability of concrete.
- Enables easy placement and compaction of concrete.
- Helps to achieve a denser concrete and smooth surface.
- Increases water tightness.
- Improves durability and strength of concrete.
- Do not contain chloride or any other components that result in corrosion in the reinforcements. Therefore, it is suitable for use in reinforced concrete structures.

Areas of Use

- Water tanks
- Canals
- Water structures
- Swimming pools
- Wastewater treatment pools
- Tunnels and culverts
- All concrete structures where waterproofing is required

Terms of Use

Concrete mix design and admixture dosage should be determined by laboratory tests according to the concrete class and properties.

Consumption Dosage

ARSTEP WATERPROOF SERIES products' dosage should be adjusted according to the total amount of binder in the mixture design. This ratio varies according to the cement, aggregate, mineral additive, water components used in concrete mixture design and also the desired fresh and hardened concrete properties. Therefore, before determining the usage rate, laboratory tests should be made according to the properties expected from fresh and hardened concrete and the mixing ratio should be determined according to these tests.

Method of Application

ARSTEP WATERPROOF SERIES products must be added to the mixing water.

Compatibility with Other Admixtures

ARSTEP WATERPROOF SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arstep / Arstep Extra / Degaset Series Products
- Arset Air Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container



Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5°C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing slowly at low speed with mechanical methods before using the product.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSET WATERPROOF SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

■ ARSET KRISTALIZE

■ ARSET PROOF / PROOF CONS



ARSET KUR Series

Curing Compounds

Product Description

ARSET KUR SERIES products are a acrylic copolymer or paraffin based one component curing compound that is applied on cementitious surfaces. Applied onto the poured fresh concrete to prevent fast loss of water.

TECHNICAL PROPERTIES

Chemical Base	Acrylic copolymer or paraffin based	Color / Appearance	Homogeneous liquid
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Advantages

- Ready-to-use can be applied easily.
- Prevents shrinkage by reducing water loss rate of fresh concrete.
- Chloride and organic solvent-free.
- Minimizes cracks.
- Decreases dusting on the surface.
- It allows for curing of the concrete and achieving maximum performance without affecting the normal setting of concrete by means of retaining the water within the concrete by means of the thin film it creates on the surface.
- It must be used especially all kinds of weather conditions in high evaporation. It prevents the shrinkage cracks and surface dusting.
- It does not prevent the adherence of cementitious and gypsum plasters to be applied on it.

Areas of Use

- On the fresh concrete and screed surfaces
- At the surface hardener applications
- In order to prevent concrete mixing water evaporation after removing the moulds
- At airport concrete and aprons
- Irrigation channels
- This product can be applied in all kinds of field concrete, channel and flume concretes and all of the surface curing applications

Terms of Use

- It is applied over the new concrete or on the top of the surface hardeners that was applied to fresh concrete by brush or roller.
- However, the concrete should be hardened enough in order to avoid damaging the surface. Immediately after the outdoor applications, the surface should be protected against the effects like rain, snow, etc. for 2-3 hours. At the end of this period, the curing material is not affected by the external factors.
- It is a ready-to-use product and should not be diluted with water. Please shake well before use.
- It cannot be applied on dry concrete surfaces. It must not be applied to the wet surfaces.
- It should not be applied on non-porous, non-absorbent and glazed surfaces.
- After the water on the freshly poured concrete evaporates, it should be applied in a thin film using a spray gun or compressed air spray machines or a roll.
- Cured areas should not be stepped on and protected from rain until they are dry.
- During the implementation, air circulation is necessary.
- Ponding and formation of bubbles should be prevented.
- The color differences on the surface shall disappear in time. It is recommended to try the product on small areas prior to application.

Consumption Dosage

The usage of **ARSET KUR SERIES** products varies depending on the ambient temperature, humidity and wind.



Method of Application

- **ARSET KUR SERIES** products are applied directly by a brush, a roll or by spraying on the surface when the surface is started to become mat after fresh concrete is poured and leveling process is completed.
- It should be applied approximately 30-45 minutes after surface hardener process has finished depending on the ambient temperature.
- It should be applied after removing the moulds. Dust, dirt and other items on the existing surface that prevent bonding should be cleaned before the application.
- It gives a transparent, mat appearance after the application.

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing slowly at low speed with mechanical methods before using the product.

Make sure that the product does not freeze.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSET KUR SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- ARSET KUR AC
- ARSET KUR P



ARSET SHOT Series

Shotcrete Additives

Product Description

ARSET SHOT SERIES products are high performance concrete additives specially designed to provide high early and final compressive strength in shotcrete applications. **ARSET SHOT SERIES** can be adjusted to give the optimum setting characteristics in different environments.

TECHNICAL PROPERTIES

Chemical Base	Special inorganic compounds mixtures
Color / Appearance	Homogeneous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10,0 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS

Arset Shot Series	TS EN 934-5 Table 2 ASTM C 1141 Type II
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Advantages

- Increases early strength of concrete.
- Low rebound.
- Provides layer thickness up to 30 cm with one application.
- Becomes easy overhead spraying because improved the bond of the shotcrete to the rock and concrete.
- Do not contain chloride or any other components that result in corrosion in the reinforcements. Therefore, it is suitable for use in reinforced concrete structures.

Areas of Use

- In tunnels
- Ground and slope stabilization
- Shotcrete applications with high early strength properties
- In mining applications

Terms of Use

ARSTEP SHOT SERIES products are added through the appropriate shotcrete nozzle. The mixing of concrete and proper nozzle process is required. Fresh concrete properties must be appropriated according to the shotcrete equipment, capacity of the equipment, ambient temperature and other conditions.

Consumption Dosage

ARSTEP SHOT SERIES products are generally dosed at rates ranging from 2.5% to 8% by weight of cement. Dosages will vary depending on desired acceleration, ambient conditions and cement used. Use of alkali-free accelerators to attain very early initial set times will cause lower 28 day strengths to occur. For this reason, it is important to determine the lowest practical dose rate to attain desired acceleration.

Method of Application

The right dosing, mixing and nozzle operation is crucial for reaching the required shotcrete quality. For pumped concrete, maximum particle size (D_{max}) is 8 mm water / cement ratio must be lower than 0,48. Suitable plasticizer should be used. Fresh concrete temperature should be over 15 °C.

Compatibility with Other Admixtures

ARSTEP SHOT SERIES products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arstep / Arstep Extra / Degaset Series Admixtures
- Arset Air Series
- Arset Zero Series

Packaging

- 250 kg drum
- 1000 kg container

Storage and Shelf Life

Shelf life is 6 months if stored in original unopened IBC tank or barrel packaging. In case of storage in bulk, it is 1 year provided that a circulation pump is used in the tank made of stainless steel.

Packaged products must be shaken before use.

If waiting for a long time, before using the product homogeneous by agitating, stirring or circulation pump make it.

It cannot be stored in normal sheet containers.

Do not use soft steel tanks.

In case of storage in large volume tanks, a circulation system is required. If the product has waited for a long time, make it homogeneous by mixing slowly at low speed with mechanical methods before using the product.

Make sure that the product does not freeze.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSET SHOT SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

■ ARSET SHOT

■ ARSET SHOT AF



ARSET STOP ASR

Alkali-Silica Reaction Controlling Admixture

Product Description

ARSET STOP ASR is a chemical additive developed to prevent and control the Alkali-Silica Reaction (ASR) that may occur in concretes containing reactive aggregate.

TECHNICAL PROPERTIES	
Chemical Base	Lithium based
Color / Appearance	Light brown liquid
pH	4,00 – 4,00
Density	1,20 ± 0,03 g/cm ³
Chlorine Content (%)	<0,1 (EN 480-10)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS	
Arset Stop ASR	ASTM C 494 Type S

Advantages

- It does not adversely affect the wet and hardened properties of concrete.
- It does not damage the steel reinforcement.
- It does not contain chlorine.
- It allows the use of regional aggregates.
- It extends the life of concrete.
- Compatible with concrete additives

Areas of Use

- In concretes containing high alkali cement and highly reactive alkali aggregate
- On bridges and highways
- At airports
- In water structures such as dams and harbors
- In industrial buildings

Terms of Use

Alkali-Silica Reaction (ASR) is a reaction in concrete between alkali hydroxides coming from components and certain types of aggregates. The alkali hydroxides in the pore water of the concrete react with the silica coming from the aggregate to form alkaline silica gel. This gel expands as it comes into contact with water and creates tensile pressure in the concrete. Cracks occur in the concrete due to this pressure. When **ARSET STOP ASR** is added to concrete, it prevents the alkali-silica reaction and protects the concrete against cracking.

Consumption Dosage

The dosage of **ARSTEP STOP ASR** varies according to the alkali amount of the concrete components and the activity. Example calculation:

- The alkali amount of the cement is determined.
- ARTEP STOP ASR is taken as 5.50 kg per kg alkali-silica.

In cement with 0.5% alkali rate;

The alkali amount is converted to decimal value and multiplied by the cement dosage in the concrete.

Cement dosage for 300 kg: $0.005 \times 300 \text{ kg} = 1.5 \text{ kg}$ Alkali amount in concrete: $1.5 \text{ kg} \times 5.50 \text{ kg} = 8.25 \text{ kg ARSET STOP ASR} / \text{m}^3 \text{ concrete}$

Method of Application

ARSTEP STOP ASR is added to the concrete mixture after 70% of the mixing water is used.

Since **ARSET STOP ASR** contains water and the addition of admixture will increase the total concrete water / cement ratio, the concrete mixture water should be reduced in the ready mixed concrete plant and the mixture design should be done accordingly.



Compatibility with Other Admixtures

ARSTEP STOP ASR can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arstep / Arstep Extra / Degaset Series Admixtures
- Arset Air Series
- Arset Doz Series
- Arset Friz Series
- Arset Fast Series
- Arset Retard Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing slowly at low speed with mechanical methods before using the product.

Some subsidence may occur during long-term storage. In this case, the product can be used by filtering.

Make sure that the product does not freeze.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSET STOP ASR** is not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).



ARSET CORROSTOP

Corrosion Inhibiting Admixture

Product Description

ARSET CORROSTOP is an additive material consisting of organic and inorganic materials that slows down the formation of corrosion in the reinforcement in concrete. Thanks to the efficiency of the components in the additive material, the molecules dissipate and cover the pores in the concrete, at the same time they form a protective layer that prevents corrosion by covering the steel reinforcement. Depending on the structure of the concrete, it shows properties that slow down or prevent corrosion.

TECHNICAL PROPERTIES	
Chemical Base	Calcium nitrite based
Color / Appearance	Light yellow liquid
pH	4,00 – 7,00
Density	1,22 ± 0,03 g/cm ³
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10,0 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

Advantages

- Extends the life of concrete.
- It extends the life of the reinforcement by preventing aggressive chemicals and moisture that may damage the steel reinforcement.
- It does not contain chlorine.

COMPLIANCE WITH STANDARDS	
Arset Corrostop	ASTM C 494 Type C

Areas of Use

- In all types of reinforced concrete
- In precast concrete
- In prestressed concretes
- In foundation concretes
- In retaining walls
- In parking lots
- In bridges and tunnels
- In marine structures
- In concrete that will be affected by aggressive environments

Terms of Use

In order for the concrete to be protected against corrosion by using **ARSET CORROSTOP** to be successful, the following issues should be considered;

- It should have a low water / cement ratio.
- There should be sufficient concrete thickness around the reinforcement.
- The chlorine content in the concrete should be low.
- Concrete should be well placed and compacted.

ARSET CORROSTOP can act as a set accelerator in concrete. Therefore, trials should be done before use, especially in hot weather, it may be necessary to reinforce with set retarding additives to prevent slump loss.

When used at high rates, it can reduce the amount of air in the concrete at a small rate. Therefore, the use of additional air entraining additives may be required.

Consumption Dosage

It is used at a rate of 2.0 - 6.0% of the total amount of binder. Optimum utilization rate should be determined according to laboratory trials.



Method of Application

ARSTEP CORROSTOP is added to the concrete mixture after 70% of the mixing water is used.

Since **ARSET CORROSTOP** contains water and the addition of admixture will increase the total concrete water / cement ratio, the concrete mixture water should be reduced in the ready-mixed concrete plant and the mixture design should be done accordingly.

Compatibility with Other Admixtures

ARSTEP CORROSTOP can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arstep / Arstep Extra / Degaset Series admixtures
- Arset Air Series
- Arset Doz Series
- Arset Retard Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing slowly at low speed with mechanical methods before using the product.

Some subsidence may occur during long-term storage. In this case, the product can be used by filtering.

Make sure that the product does not freeze.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSET CORROSTOP** is not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).



ARSET PUMP

Pumping Aid

Product Description

ARSET PUMP is a chemical additive that provides easy and uninterrupted pumping of concrete.

TECHNICAL PROPERTIES	
Chemical Base	Inorganic material
Color / Appearance	Light cream liquid
pH	4,00 – 7,00
Density	1,10 ± 0,02 g/cm ³
Chlorine Content (%)	<0,1 [EN 480-10]
Alkaline Content (%)	<10,0 [EN 480-12]
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS	
Arset Pump	TS EN 934-2

Advantages

- It provides a continuous and homogeneous concrete.
- It enables the concrete to be pumped horizontally and vertically over long distances.
- It prevents the abrasion of concrete pumps and pipes.
- It does not have a negative effect on the properties of concrete.
- It does not contain chlorine.

Areas of Use

- For lubrication of the pumping line before pumping in all kinds of concrete
- Concrete mixes that are not suitable for pumping, do not have suitable granulometry, have low thin material ratios, have the risk of segregation, and cause high pressure

Terms of Use

ARSET PUMP is added to the concrete mixture after the addition of water in the plant or into the ready mixed concrete in the transmixer at the construction site. It should not be added to the dry concrete mixture in the plant. Preliminary trials must be made in determining the dosage of additives.

ARSET PUMP is generally compatible with all kinds of concrete additives. However, when used with naphthalene sulphonate-based concrete additives, the setting process and compliance should be observed.

Consumption Dosage

In concrete that is difficult to pump; Average 0.2 - 0.4% of cement weight

To reduce the pump pressure; Average 0.5 - 1.0% of cement weight

By evacuating into the pump inlet chamber; Average 2.0 - 4.0% of cement weight

Method of Application

- **As a concrete additive in the concrete mixture in the plant;**
ARSET PUMP is added to the aggregate cement mixture after the water is added in the plant.
The material shows its effect after 2-3 minutes of concrete mixing.
- **As a concrete admixture, in the ready mixed concrete mixture in the transmixer at the construction site;**
It is added to the ready-mixed concrete in the truck mixer and mixed for 2-3 minutes.
- **By evacuating into the pump inlet chamber;**
ARSET PUMP is diluted with water at an average ratio of 1: 1 and poured into the concrete inlet chamber of the pump.
The concrete pump runs idle for a few minutes.
When the water in the line is drained, the pump is ready for use.



Compatibility with Other Admixtures

ARSTEP PUMP can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arstep / Arstep Extra / Degaset Series Admixtures
- Arset Air Series
- Arset Doz Series
- Arset Friz Series
- Arset Fast Series
- Arset Retard Series
- Arset Zero Series

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing slowly at low speed with mechanical methods before using the product.

Some subsidence may occur during long-term storage. In this case, the product can be used by filtering.

Make sure that the product does not freeze.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSET PUMP** is not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).



ARSET VISCO

Underwater Concrete Admixtures

Product Description

ARSET VISCO is a liquid concrete admixture designed for use in underwater concrete pouring.

TECHNICAL PROPERTIES	
Chemical Base	Cellulose based
Color / Appearance	Homogeneous viscous liquid
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<10,0 (EN 480-12)
Corrosion Behavior	Contains only components according EN 934-1 Annex A.1
Dangerous Substances	Comply with annex AZ

COMPLIANCE WITH STANDARDS	
Arset Visco	TS EN 934-2

Advantages

- **ARSET VISCO** admixture improves the viscosity of the concrete when used in concrete, prevents the cement and other fine components in the concrete from being washed away from the concrete, and ensures that a concrete that does not segregate in the water and does not dissociate in the water is prevented from penetrating into the concrete mass.
- The use of **ARSET VISCO** when compared to an unused admixture concrete results since it reduces the strength of the concrete that is poured outdoors, but there is an increase in strength in the concrete poured underwater, because it also prevents washing and decomposition of the cement-mineral additive-fine aggregate.
- The use of **ARSET VISCO** admixture does not change the workability time of the concrete in the short time (~ 45-60 minutes).
- A trial should be made for a longer period.
- The use of **ARSET VISCO** admixtures does not change the concrete normal setting time.
- The chemicals it contains do not damage the fittings.
- The chemicals it contains are alkaline resistant.
- Can be used in fresh and saltwater environments.
- Ensures good adhesion of cement and aggregate components in concrete.
- Provides a well-pumpable, non-segregating, non-dissipating concrete.
- Increases resistance to chemicals.
- Provides impermeability in concrete.
- Do not contain chloride or any other components that result in corrosion in the reinforcements. Therefore, it is suitable for use in reinforced concrete structures.

Areas of Use

- For obtaining concrete that does not decompose in underwater castings
- As an additive in injection and grouting mortars



Terms of Use

- Use with naphthalene sulfonate-based additives is not suitable.
- Cement CEM I 42.5 and its dosage should be at least 360 kg.
- The water / cement ratio should be between 0.40 and 0.45.
- High performance, low water / cement ratio concrete and suitable high water reducer to achieve the required slump (18-25 cm), hyper plasticiser (DEGASET SERIES) should be used.
- Air entraining additives may be used in the range of 4.0-6.0%.
- Aggregate Dmax 16 mm past, fine aggregate, it should be 50-60%.
- Mineral additive should be used up to 15% of cement.

Consumption Dosage

ARSTEP VISCO is used 0,5-2,0% of total binder. Where water flow is fast, it should be between 1.5-2.0%. It is necessary to test for the correct and optimum ratio.

Method of Application

Ready-mixed concrete plant: It is added to concrete components like traditional concrete admixture.

Usage in the truck mixer on the construction site: While turning the truck mixer, slowly add the **ARSET VISCO** mixture onto the ready-mixed concrete in the truck mixer and mix for at least 5 minutes before pouring the concrete.

Compatibility with Other Admixtures

ARSTEP VISCO products can be combined with the following admixtures. Laboratory tests should be carried out before use.

- | | |
|-------------------------|---------------------|
| ■ Arstep / Arstep Extra | ■ Arset Air Series |
| / Degaset Series | ■ Arset Zero Series |
| Admixtures | |

Packaging

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing slowly at low speed with mechanical methods before using the product.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSET VISCO** is not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).



ARSET REMOVER Series

Concrete Remover Chemicals

Product Description

ARSET REMOVER SERIES products are an agent to prevent concrete residues to stick on the outer surface of concrete pumps and truck mixers and also remove the existing concrete residues that has already hardened.

TECHNICAL PROPERTIES

Chemical Base

Acid based

Color / Appearance

Homogeneous liquid

Advantages

- Does not damage the surface, inner and outer appearance of the materials to be used.
- Cleans dirt and rust. Does not discolor the dyes.
- Cleans the clogging resulting from concrete wastes.

Areas of Use

- At the servicing of concrete pumps before starting or after finishing work
- At the servicing of truck mixers before starting or after finishing work
- For the cleaning of concrete pumps and truck mixers
- For the servicing and protection of cement silos
- For the cleaning ceramic, granite, natural stones

Terms of Use

- In case of cleaning thin sheet metals and thin iron materials, it is necessary to dilute 1/5 ratio.
- Please use gloves and goggles during application and avoid contact with skin. Please read the Safety Data Sheet (SDS).

Method of Application

ARSET REMOVER SERIES products are ready-to-use. It is applied on the surface by means of a suitable brush. The brush is pushed on the surface that will be cleaned. It can be applied more than single layer depending on the condition of the surface. 15 minutes after finishing the application, the surface should be washed by water thoroughly. Contaminated water should be avoided to spill around.

It can be applying only a single layer on the clean surface if it will be used in order to prevent concrete to stick on it. It is recommended to use protective clothes, gloves, glasses while applying the material.

Packaging

- 30 kg plastic drum

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing slowly at low speed with mechanical methods before using the product.

Make sure that the product does not freeze.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSET REMOVER SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- ARSET REMOVER (ARSET REMOVER L)
- ARSET REMOVER CONS (ARSET REMOVER)

* In case of name change, the previous name of the product is shown in parenthesis.

ARSTEP LUB Series

Mould Releasing Agents

ARSET



Product Description

ARSET LUB SERIES products are a mineral oil based, mold release agent that provides easy separation of the molds from concrete and creates smooth concrete surfaces.

TECHNICAL PROPERTIES

Chemical Base

Mineral oil based

Color / Appearance

Homogeneous liquid

Advantages

- It enables easy and fast separation of the mold from concrete.
- Provides easy cleaning of formwork.
- Provides smooth and clean concrete surface.
- Does not leave any stain on the formwork.
- Extends the life of the formwork.
- Prevents stains on formwork.
- Protects steel molds against corrosion.
- **ARSET LUB SERIES** products are solvent- free.

Areas of Use

- Specially recommended for steel formwork.
- It can also be used for other mold systems such as plastic and plywood formworks.

Consumption Dosage

The consumption varies depending on the condition, surface, type and separation method of the mold.

Method of Application

- The molds should be properly cleaned prior to using. Molds should be free from water and dust.
- It should be stirred thoroughly before application. It should be applied by spraying or with brush-roller.
- It can be applied in one or two layers depending on the condition of the mold.
- Concrete should not be poured immediately into a newly greased mold; please wait for at least 3 hours.
- Pay attention to the formation of ponding on horizontal surfaces.

Packaging

- 30 kg plastic drum
- 180 kg drum

Storage and Shelf Life

Shelf life is 24 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing slowly at low speed with mechanical methods before using the product.

Make sure that the product does not freeze.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARSET LUB SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- ARSET LUB 10

- ARSET LUB 20

CEMENT



AD



ARCEM



ADDITIVES

ARCEM Series products are Cement and Mineral Additives. They are used at cement factories as grinding agents (capacity increase), quality enhancers (strength increase), chromium reducers, and pack-set reducers. They may provide one or more than one of the above mentioned properties.

ARCEM



- Strength and Capacity Increasing Cement Additives
- Grinding Aid Cement Additives
- Pack Set Inhibitors
- Chrome [VI] Reducing Cement Additives



PURPOSE OF USAGE		PAGE NO	116	118	120	122	123
		PRODUCTS	ARCEM FORCE SERIES	ARCEM FINE SERIES	ARCEM MINERAL SERIES	ARCEM PACK SERIES	ARCEM Ch-R SERIES
		Cement Grinding Aid		■			
		Grinding Aid and Strength Enhancer	■				
		Enhancing Early and Final Strength	■				
		Pack Set Inhibitor	■			■	
		Cr (IV) Reducer in Cement					■
	Mineral Grinding Aid				■		



ARCEM FORCE Series

Strenght and Capacity Increasing Cement Additives

Product Description

ARCEM FORCE SERIES products are strength and capacity increasing cement additives used as early and final strength enhancers for all cement types.

TECHNICAL PROPERTIES

Chemical Base

Alkanolamines based

Color / Appearance

Homogeneous liquid

Advantages

- Increases quality and strength of cement.
- Reduces water demand of cement.
- Achieves high mechanical strengths for short, mid and long terms.
- Resolves pack set problem and increases mill capacity.
- Grinding aids neutralizes coagulation forces.
- Provides energy savings.
- Reduces cement production costs.
- Increases cement flowability by decreasing the agglomeration of cement particles.
- Obtains desired cement fineness faster.
- Achieves self-setting of cement in the silos.

Areas of Use

- All types of cement production
- Ball mills (closed and open circuits)
- Vertical mills
- Other grinding systems

Terms of Use

ARCEM FORCE SERIES products should be accurately dispensed through a calibrated dosing system, suitable for the cement mill and output required.

Consumption Dosage

ARCEM FORCE SERIES products' dosage should be determined by preliminary trials to be made in the factory, according to the optimum dosage of the desired cement properties.

Method of Application

ARCEM FORCE SERIES products are dropped directly onto the clinker on the conveyor. Balanced dosing is provided by using the appropriate dosage pump in the additive addition.

Packaging

- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARCEM FORCE SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).



Products of Series

- ARCEM FORCE 160 / FORCE 160 R1
- ARCEM FORCE 252
- ARCEM FORCE 306 / FORCE 306 R
- ARCEM FORCE 312
- ARCEM FORCE 314
- ARCEM FORCE 315 / FORCE 315 R
- ARCEM FORCE 505
- ARCEM FORCE 511 / FORCE 511 R
- ARCEM FORCE 512 / FORCE 512 ER
- ARCEM FORCE 517
- ARCEM FORCE 520
- ARCEM FORCE 521 / FORCE 521 R
- ARCEM FORCE 522 / FORCE 522 K
- ARCEM FORCE 524
- ARCEM FORCE 530
- ARCEM FORCE 540
- ARCEM FORCE 541
- ARCEM FORCE 542
- ARCEM FORCE 545
- ARCEM FORCE 550
- ARCEM FORCE 553
- ARCEM FORCE 554 / FORCE 554 A
- ARCEM FORCE 560
- ARCEM FORCE 600
- ARCEM FORCE 601
- ARCEM FORCE 602 / FORCE 602 HS
- ARCEM FORCE 606
- ARCEM FORCE 611
- ARCEM FORCE 612
- ARCEM FORCE 614
- ARCEM FORCE 1023 S
- ARCEM FORCE 1035
- ARCEM FORCE 1037
- ARCEM FORCE 4286



ARCEM FINE Series

Grinding Aid Cement Additives

Product Description

ARCEM FINE SERIES products are a cement additive that is used as grinding aid for all cement types.

TECHNICAL PROPERTIES

Chemical Base	Alkanolamines, glycols based	Color / Appearance	Homogeneous liquid
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Advantages

- Increases dispersion and grinding efficiency.
- Resolves pack set problem and increases mill capacity.
- Grinding aids neutralizes coagulation forces.
- Provides energy savings.
- Reduces cement production costs.
- Increases cement flowability by decreasing the agglomeration of cement particles.
- Desired cement fineness is obtained at a shorter time.
- Achieves self-setting of cement in the silos.

Areas of Use

- All types of cement production
- Ball mills (closed and open circuits)
- Vertical mills
- Other grinding systems

Terms of Use

ARCEM FINE SERIES products should be accurately dispensed through a calibrated dosing system, suitable for the cement mill and output required.

Consumption Dosage

ARCEM FINE SERIES products' dosage should be determined by preliminary trials to be made in the factory, according to the optimum dosage of the desired cement properties.

Method of Application

ARCEM FINE SERIES products are dropped directly onto the clinker on the conveyor. Balanced dosing is provided by using the appropriate dosage pump in the additive addition.

Packaging

- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARCEM FINE SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).



Products of Series

- ARCEM FINE 100
- ARCEM FINE 111
- ARCEM FINE 112
- ARCEM FINE 115
- ARCEM FINE 116
- ARCEM FINE 118
- ARCEM FINE 123
- ARCEM FINE 132
- ARCEM FINE 141
- ARCEM FINE 142
- ARCEM FINE 300
- ARCEM FINE 800
- ARCEM FINE 1117



ARCEM MINERAL Series

Mineral Grinding Chemical Additives

Product Description

ARCEM MINERAL SERIES products are a mineral grinding chemical that is used as grinding aid for mineral, coal, calcium carbonate, limestone, silica, calcium oxide etc. They are also chemical additives developed for grinding minerals used for food.

TECHNICAL PROPERTIES

Chemical Base	Alkanolamines, glycols based	Color / Appearance	Homogeneous liquid
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Advantages

- Increases grinding efficiency.
- Provides energy savings.
- Reduces mineral grinding costs.
- Increases powder flow ability.
- Decreases the agglomeration of mineral particles.
- Reduces or eliminates blockages in silos.

Areas of Use

Used in the grinding process of the following minerals and cement raw materials at vertical mills and ball mills.

- Barite
- Barium sulfate
- Limestone
- Calcium carbonate
- Calcium oxide
- Calcium sulfate
- Chrome oxide
- Dolomite
- Perlite
- Feldspar
- Magnesium
- Quartz
- Zinc

Terms of Use

ARCEM MINERAL SERIES products should be accurately dispensed through a calibrated dosing system, suitable for the grinding mill and output required.

Consumption Dosage

ARCEM MINERAL SERIES products' dosage should be determined by preliminary trials to be carried out in the factory according to the optimum dosage of the desired grinding properties.

Method of Application

ARCEM MINERAL SERIES products are dropped directly onto the minerals on the conveyor. Balanced dosing is provided by using the appropriate dosage pump in the additive addition.

Packaging

- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.



Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARCEM MINERAL SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- ARCEM MINERAL 100 / MINERAL 100 R
- ARCEM MINERAL 500 / MINERAL 500 FOOD
- ARCEM MINERAL 501
- ARCEM MINERAL 502
- ARCEM MINERAL 503
- ARCEM MINERAL 505
- ARCEM MINERAL 606



ARCEM PACK Series

Pack Set Inhibitor

Product Description

ARCEM PACK SERIES products are cement additives used as grinding aid and pack set inhibitor for all cement types.

TECHNICAL PROPERTIES

Chemical Base	Alkanolamines, glycols based	Color / Appearance	Homogeneous liquid
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Advantages

- Increases dispersion and grinding efficiency.
- Resolves pack set problem and increases mill capacity.
- Reduces cement production costs.
- Increases cement flowability by decreasing the agglomeration of cement particles.
- Desired cement fineness is obtained at a shorter time.
- Achieves self-setting of cement in the silos.

Areas of Use

- All types of cement production
- Ball mills (closed and open circuits)
- Vertical mills
- Other grinding systems

Terms of Use

ARCEM PACK SERIES products should be accurately dispensed through a calibrated dosing system, suitable for the cement mill and output required.

Consumption Dosage

ARCEM PACK SERIES products' dosage should be determined by preliminary trials to be made in the factory, according to the optimum dosage of the desired cement properties.

Method of Application

ARCEM PACK SERIES products are dropped directly onto the clinker on the conveyor. Balanced dosing is provided by using the appropriate dosage pump in the additive addition.

Packaging

- 250 kg drum
- 1000 kg container
- Bulk

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost.

If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Make sure that the product does not freeze. If the product freezes, it should be thawed by keeping it at room temperature without using direct heat and mixed by mechanical methods until it becomes homogeneous.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. ARCEM PACK SERIES products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- ARCEM PACK 100
- ARCEM PACK 200
- ARCEM PACK 300
- ARCEM PACK 400
- ARCEM PACK 500
- ARCEM PACK 523 (ARCEM FORCE 523)

ARCEM Ch-R Series

Chrome (VI) Reducing Cement Additives

ARCEM



Product Description

ARCEM Ch-R SERIES products are the chrome reducing agent that transforms Cr (VI) into Cr (III) for all cement types, during cement hydration by acting on soluble chromates.

TECHNICAL PROPERTIES

Chemical Base	Liquid Products: Antimony based Powder Products: Iron (II) Sulfate	Color / Appearance	Homogeneous viscous liquid Light green powder
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Advantages

- Reduces health problems caused by chrome.
- Achieves high rates of chrome reduction with low doses.
- Positive influence on early and late strength of cement.

Areas of Use

In all types of cement, it is used to reduce Chromium (VI) below 2 ppm during production

Terms of Use

ARCEM Ch-R SERIES products should be accurately dispensed through a calibrated dosing system, suitable for the cement mill and output required.

Consumption Dosage

ARCEM Ch-R SERIES products' dosage may differ according to the properties of optimum dosage clinker, cement type and factory properties.

Method of Application

Products in liquid form are used by dripping directly onto the clinker on the conveyor, and powder products are used by blending with ground cement during packaging. Balanced dosing is provided by using the appropriate dosage pump in the additive addition.

Packaging

- 250 kg drum
- 1000 kg IBC container
- 25 kg bag

Storage and Shelf Life

Shelf life is 12 months from the date of production when stored in original unopened and undamaged packages (drums, barrels, IBC containers) at temperatures between +5 °C and +35 °C, protecting from direct sunlight, excessive heat and frost. If the product has waited for a long time, make it homogeneous by mixing it mechanically before using it.

Safety Measures

Use protective clothes, gloves, glasses and mask compatible with health and safety regulations during the application. Avoid direct contact with eyes and skin during storing and application, in case of contact wash off thoroughly with soap and water, if ingested seek medical attention immediately. Store away from all foodstuffs. Keep away from children. **ARCEM Ch-R SERIES** products are not flammable. For detailed safety information please consult the product's Safety Data Sheet (SDS).

Products of Series

- ARCEM Ch-R 100
- IRON (II) SULFATE

CONSTR



CHW

UCTION

YAPIFINE



**WATERPROOFING
SYSTEMS**



**REPAIR &
REINFORCEMENT**



**FLOORING
SYSTEMS**



**MOLD RELEASE AGENTS &
MORTAR ADDITIVES**



**TILE ADHESIVES &
GROUTS**



**THERMAL INSULATION
SYSTEMS**

EMICALS

YAPIFINE



WATERPROOFING SYSTEMS

- Cement Based Products
- Crystalline Products
- Acrylic Based Products
- Bitumen Based Products
- Polyurethane Based Products
- PVC Membranes
- Bitumen Membranes
- Sealant Products

“Waterproofing and sealant products offer a wide range of solutions designed for different uses, that protect structures from negative impacts of water and moisture while improving durability and providing lifecycle extension.”

APPLICATION AREAS		PAGE NO	PRODUCTS																												
		128	130	132	134	136	138	140	142	144	146	148	150	152	154	156	158	159	160	161	162	164	166	168	170	172	174	176	178	179	
		YAPIFINE HYDRA PROOF	YAPIFINE HYDRA PROOF FLEX	YAPIFINE HYDRA PROOF UV	YAPIFINE HYDRA SHOCK	YAPIFINE HYDRA CRYSTAL	YAPIFINE HYDRA ACRYLIC	YAPIFINE HYDRA ACRYLIC UV	YAPIFINE HYDRA BITUMEN	YAPIFINE HYDRA BITUMEN 2C	YAPIFINE HYDRA BITUMEN PU 2C	YAPIFINE HYDRA PU UV	YAPIFINE HYDRA PU CLEAR	YAPIFINE HYDRA SERUM	YAPIFINE HYDRA PU PRIME	YAPIFINE HYDRA PU TILE PRIME	YAPIFINE HYDRA PVC MEMBRANE	YAPIFINE HYDRA PVC MEMBRANE ROOF	YAPIFINE HYDRA PVC MEMBRANE WP	YAPIFINE HYDRA BITUMEN MEMBRANE BAND	YAPIFINE HYDRA BITUMEN MEMBRANE EASY	YAPIFINE GOOP LM	YAPIFINE GOOP HM	YAPIFINE GOOP HYBRID	YAPIFINE ULTRA TACK	YAPIFINE GOOP PUTTY	YAPIFINE GOOP PUTTY TX	YAPIFINE GOOP DILATATION	YAPIFINE GOOP PUFF	YAPIFINE GOOP PAH	
WET AREA / POOLS / WATER TANK	Wet areas such as bathrooms and kitchens	■	■				■	■				■																			
	Balconies and terraces		■	■			■	■				■	■																		
	Surfaces such as concrete, plaster and screed	■	■	■			■	■																							
	Beneath the tiling for vertical and horizontal surfaces on internal installations	■	■				■																								
	Beneath the tiling for vertical and horizontal surfaces on external installations		■				■																								
	On transparent ceramic surfaces												■																		
	Swimming pools and like		■	■																■											
	Ornamental pools		■																												
	Portable water tanks		■	■											■					■											
	Thermal pool		■	■																■											
Active water leakages					■									■																	
TERRACE / ROOF	(To be covered) Terraces and roofs		■								■																				
	(Uncovered) Terraces and roofs			■			■					■																			
	UV resistance			■								■																			
	Aliphatic UV resistance												■																		
	Roof gutters			■			■	■				■																			
	Green terrace and roofs										■						■			■											
	Metal surfaces						■	■														■	■	■	■						
FOUNDATION / BASEMENT	Basements								■	■	■						■				■										
	Shear walls								■	■	■									■											
	Tunnels, bridges and subways										■	■		■			■			■											
	Basement walls - Exterior Insulation								■	■	■																				
	Basement Walls - Interior Insulation					■																									
	Elevator bases				■																										
PRIMERS	Primer														■																
	Primer for glossy surfaces like ceramic															■															
	Primer for absorbent surfaces													■																	
DETAILS	Wall and floor corners below ground level																					■	■	■	■					■	
	Dilatation and movable joints																							■		■	■	■			
	Cold joints																												■	■	

YAPIFINE HYDRA® PROOF

Two Component Semi-Flexible Waterproofing Material

Product Description

A semi-flexible waterproofing two-component material that is a combination of liquid polymers and special additives which can only be used from the positive side.

TECHNICAL PROPERTIES

Appearance	Component A: Grey powder Component B: White liquid	Adhesive Strength	≥ 0,8 N/mm ²
Mixture Density	1.78 kg/L ± 0.50	Water Transmission Rate	< 0,1 kg/(m ² .h ^{0,5})
Service Temperature	-25°C / +80°C	Water Vapour Transmission Rate	< 0,6 g/(h.cm ²)
Time Before Use	min. 3 days	Pressurised Water Strength	5 Bar positive
		Reaction to Fire	Bs1d0

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Semi-flexible.
- Creates waterproof covering without joint or juncture.
- Easy to apply. Applicable with brush and/or trowel.
- Bonds well on surfaces due to its high adherence.
- Allows the concrete to breathe due to its structure permeable to water vapour.
- Resistant to freeze-thaw cycle.
- Nontoxic and noncorrosive.

Areas of Use

- Horizontal and vertical applications
- Balconies and terraces, on the condition of being covered
- Wet areas such as bathroom, toilet and kitchen
- On surfaces of concrete, plaster and screed

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

The damaged parts of the concrete, fractures and static cracks on the surface should be repaired with the appropriate YAPIFINE MEND repair mortar first. The application of the YAPIFINE HYDRA PROOF should start 3-4 days after the usage of the repair mortar.

Water infiltration should be eliminated with the usage of YAPIFINE HYDRA SHOCK, the dynamic cracks should be filled with YAPIFINE GOOP HYBRID or YAPIFINE GOOP sealant.

Sharp corner and edge joints should be chamfered.

The application surface should be saturated with water, the saturation procedure should begin 24 hours before the application and the surface should be kept wet during the application as well. Make sure there are no water puddles on the surface. (last sentence might change)

On absorbent surfaces it is recommended to use YAPIFINE UNI PRIME.

Mixture Preparation

20 kg of powder component should be slowly added to 5 kg of liquid component.

No foreign substances or liquids should be added to the mixture.

The mixing process should be performed with a low-speed mixer for 5 minutes until the mixture reaches a homogenous state. Once a homogenous state is reached the mixture should rest for 3 minutes after which it should be mixed for 2 more minutes and finally the mixture should be applied within 30 minutes of the last mixing step.



Application Information



The mixture should be applied on the intended surface with a brush or trowel in a minimum of two layers with dry film thickness of 2 mm. The first layer should be fully dry before the second and the layers are applied perpendicular to the previous layer. Make sure layers are homogenous and smooth. The application should be done in the same direction on any specific layer.

After topcoat, the surface should be protected from direct sunlight, air circulation and frost for 3 days. The substrate should be wetted and kept damp if needed.

Application Conditions

Do not apply on surfaces exposed to sunlight for too long, as well as too hot and frozen surfaces.

Ambient temperature: Between +5 °C and +30 °C.

Avoid application under strong wind or direct sunlight.

Only use YAPIFINE liquid component for mixture and never add water.

The indicated consumption amount is in general sense. It may vary depending on application conditions and surface characteristics.

The application area becomes completely watertight within 5-7 days. In order to attain the projected and required long-lasting performance, it is recommended to cover the surface with appropriate material after application.

Packaging

- Component A: 20 kg kraft bag
- Component B: 5 kg plastic drum

Consumption

2.5 – 3 kg/m² of powder consumption for 2 coats of application

Storage and Shelf Life

The shelf life of the product is 12 months when stored within non-tampered original packaging in dry (maximum relative humidity 60%) and cool (ambient temperature between +5°C and +25°C) environment.

Safety Precautions

In case of contact with eyes or ingestion, rinse immediately with plenty of clean water and seek medical attention.

Avoid direct contact with eyes and skin.

Since it's cement based, do not breathe.

Please read Safety Data Sheet (SDS) for further safety information.



YAPIFINE HYDRA® PROOF FLEX

Two Component Flexible Waterproofing Material

Product Description

Cement and acrylic based, polymer reinforced, two component, flexible waterproofing material modified with chemical additives and applicable exclusively on positive side.

TECHNICAL PROPERTIES

Appearance	Component A: Grey powder Component B: White liquid	Adhesion Strength After Thermal Ageing	≥ 1 N/mm ²
Mixture Density	1.80 kg/L ± 0.50	Adhesive Strength Without Defrosting Salt Effect	≥ 1 N/mm ²
Pot Life	6 hours	Pressurised Water Strength	7 Bar Positive
Application Temperature	Between +5°C and +30°C	Water Vapour Permeability	Class I ; Sd < 5
Service Temperature	-40°C / +80°C	Chlorine Ion Diffusion	≤ 200 Coulomb (Class: very low permeability)
Time Before Use	3-7 days	Carbon Dioxide Permeability	Sd > 50 m
Waiting Period Between Layers	5-6 hours	Reaction to Fire	Cs1d0
Adhesive Strength	≥ 0,8 N/mm ²		
Capillary Water Absorption	< 0,1 kg/(m ² .h ^{0.5})		
Crack Bridging	≥ 2,5 mm		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Fully elastic.
- Creates waterproof covering without joint or juncture.
- Offers long service time.
- Easy to apply. Applicable with trowel, roller, brush or spraying machine.
- Prevents carbonation on concrete.
- Does not cause shrinking or cracking.
- Highly resistant against chlorine ions.
- Applicable on fresh screed and concrete surfaces due to its crack bridging property.
- Allows the concrete to breathe due to its water vapour permeable structure.
- Resistant to freeze-thaw cycle.
- Nontoxic and noncorrosive.
- Not affected by vibration and deformation due to its high elasticity.

Areas of Use

- Horizontal and vertical applications
- Balconies and terraces, on the condition of being covered
- Foundations, basement walls, garages, flumes and shear walls
- Houses, shopping malls, hospitals
- Wet areas such as bathroom, toilet and kitchen
- On surfaces of concrete, plaster and screed
- Water tanks, swimming and decorative pools
- Facilities such as spa and turkish bath

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

The damaged parts of the concrete, fractures and static cracks on the surface should be repaired with the appropriate YAPIFINE MEND repair mortar first. The application of the YAPIFINE HYDRA PROOF FLEX should start 3-4 days after the usage of the repair mortar.

Water infiltration should be eliminated with the usage of YAPIFINE HYDRA SHOCK, the dynamic cracks should be filled with YAPIFINE GOOP HYBRID or YAPIFINE GOOP sealant. Sharp corner and edge joints should be chamfered.

The application surface should be saturated with water, the saturation procedure should begin 24 hours before the application and the surface should be kept wet during the application as well. Make sure there are no water puddles on the surface. (last sentence might change) On absorbent surfaces it is recommended to use YAPIFINE UNI PRIME.



Mixture Preparation

20 kg of powder component should be slowly added to 10 kg of liquid component. No foreign substances or liquids should be added the mixing process.

The mixing process should be performed with a low-speed mixer for 5 minutes until the mixture reaches a homogenous state. Once a homogenous state is reached the mixture should rest for 5 minutes before it is mixed again for 1-2 more minutes and finally should be applied within 30 minutes of the last mixing step.

Application Information

The mixture should be applied on the intended surface in a minimum of two layers. The first layer should be fully dry before the second and any additional layers are applied perpendicular to the previous application.

Make sure layers are homogenous and smooth. Application should be in the same direction on each layer.

Wait for at least 5-6 hours between layers depending on temperature.

Total application thickness of 2-3 mm will be sufficient.

Recommended to use waterproofing mesh or seal between layers in order to improve carrying capacity of product.

After topcoat application, the surface can be smoothed by means of a dry sponge.

After topcoat, substrates should be protected from direct sunlight, air circulation and frost for 3 days. The substrate should be wetted and kept damp if needed.

Application Conditions

Do not apply on surfaces exposed to sunlight for too long, as well as too hot and frozen surfaces.

Ambient temperature: Between +5 °C and +30 °C.

Avoid application under strong wind or direct sunlight.

Only use YAPIFINE liquid component for mixture and never add water.

The indicated consumption amount is in general sense. It may vary depending on application conditions and surface characteristics.

The application area becomes completely watertight within 5-7 days. In order to attain the projected and required long-lasting performance, it is recommended to cover the surface with appropriate material after application.

Packaging

- Component A: 20 kg kraft bag
- Component B: 10 kg plastic drum

Consumption

2.5-3 kg/m² of powder consumption for 2 mm of application thickness

Storage and Shelf Life

The shelf life of the product is 12 months when stored within non-tampered original packaging in dry (maximum relative humidity 60%) and cool (ambient temperature between +5°C and +25°C) environment.

Safety Precautions

In case of contact with eyes or ingestion, rinse immediately with plenty of clean water and seek medical attention.

Avoid direct contact with eyes and skin

Since it's cement based, do not breathe.

Please read Safety Data Sheet (SDS) for further safety information.



YAPIFINE HYDRA® PROOF UV

Two Component UV-Resistant Flexible Waterproofing Material

Product Description

White cement and acrylic based polymer reinforced fully elastic two-component waterproofing material that is produced by means of modification with chemical additives that can only be used on its positive side which is UV-resistant and is suitable for light pedestrian traffic.

TECHNICAL PROPERTIES

Appearance	Component A: White powder Component B: White liquid	Adhesion Strength After Thermal Ageing	$\geq 1 \text{ N/mm}^2$
Mixture Density	1,80 kg/lt $\pm 0,50$	Adhesive Strength Without Defrosting Salt Effect	$\geq 1 \text{ N/mm}^2$
Pot Life	6 hours	Pressurised Water Strength	7 Bar Positive
Application Temperature	Between $+5^\circ\text{C}$ and $+30^\circ\text{C}$	Water Vapour Permeability	Class I ; $\text{Sd} < 5$
Service Temperature	-40°C / $+80^\circ\text{C}$	Chlorine Ion Diffusion	$\leq 200 \text{ Coulomb}$ (Class: very low permeability)
Time Before Use	3-7 days	Carbon Dioxide Permeability	$\text{Sd} > 50 \text{ m}$
Waiting Period Between Layers	5-6 hours	Reaction to Fire	Cs1d0
Adhesive Strength	$\geq 0,8 \text{ N/mm}^2$		
Capillary Water Absorption	$< 0,1 \text{ kg}/(\text{m}^2 \cdot \text{h}^{0,5})$		
Crack Bridging	$\geq 2,5 \text{ mm}$		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of $+23 \pm 2^\circ\text{C}$ temperature with relative humidity of 50 ± 5 . Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Fully elastic.
- UV-resistant; does not shrink or crack.
- Easy to apply. Applicable with trowel, roller, brush or spraying machine.
- Applicable on fresh screed and concrete surfaces due to its crack bridging property.
- Prevents carbonation on concrete.
- Resistant against chlorine ions.
- Allows the concrete to breathe due to its structure permeable to water vapor.
- Resistant to freeze-thaw cycle.
- Nontoxic and noncorrosive.

Areas of Use

- Horizontal and vertical applications
- Terrace roofs, on the condition of staying uncovered
- Water tanks, swimming and ornamental pools
- Facilities such as spas and Turkish baths
- Wet areas such as bathrooms and kitchens
- On surfaces of concrete, plaster and screed

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

The damaged parts of the concrete, fractures and static cracks on the surface should be repaired with the appropriate YAPIFINE MEND repair mortar first. The application of the YAPIFINE HYDRA PROOF UV should start 3-4 days after the usage of the repair mortar.

Water infiltration should be eliminated with the usage of YAPIFINE HYDRA SHOCK, the dynamic cracks should be filled with YAPIFINE GOOP HYBRID or YAPIFINE GOOP sealant.

Sharp corner and edge joints should be chamfered.

The application surface should be saturated with water, the saturation procedure should begin 24 hours before the application and the surface should be kept wet during the application as well. Make sure there are no water puddles on the surface. (last sentence might change)

On absorbent surfaces it is recommended to use YAPIFINE UNI PRIME.



Mixture Preparation

The 10 kg liquid component is added to a clean container. The 20 kg powder component is slowly added to the liquid. No other foreign substances or water should be added to the mixture.

Components are mixed preferably with a low speed mixer until a homogenous mixture is achieved.

The prepared mortar is left to rest for 5 minutes after which it is once again mixed for 1-2 more minutes before application.

The mixture inside the container should be used within 30 minutes.

Application Information



The prepared mixture is applied in a minimum of 2 layers onto the surface that is saturated with water with a brush, trowel or spraying machine. The layers should be homogeneous, smooth and even. The application should be done in the same direction on any specific layer.

A new layer should be applied after the last applied layer dries off.

The layers are applied in a perpendicular direction relative to the layer applied previously.

Depending on the temperature 5 to 6 hours should pass before applying a new layer.

A total application thickness of 2-3 mm will suffice.

It is recommended to use waterproofing mesh or seal between the layers in order to improve the carrying capacity of the product.

After the application of the last layer, the surface can be smoothed out with a dry sponge.

After the last layer, the product should be protected from direct sunlight, air circulation and frost for 3 days. Product should be wetted and kept damp if needed.

Application Conditions

Do not apply on surfaces that are too hot, frozen or exposed to sunlight for too long.

Ambient temperature: Between +5 °C and +30 °C.

The application area should be kept free from the effects of wind and direct sunlight during application.

The mixture should be prepared using only its own liquid, water should not be added during the mixture preparation.

The final consumption amount might vary depending on application conditions and surface characteristics.

The application area becomes completely water resistant 5-7 days after the application.

Packaging

- Component A: 20 kg kraft bag
- Component B: 10 kg plastic drum

Consumption

2.5-3.4 kg/m² of powder consumption for 2 mm of application.

Storage and Shelf Life

The shelf life of the product is 12 months when stored in its original packaging in dry (maximum relative humidity 60%) and cool (ambient temperature between +5°C and +25°C) environment.

Safety Precautions

In case of contact with eyes or ingestion, rinse immediately with plenty of clean water and seek medical attention.

Avoid direct contact with eyes and skin

Since it's cement based, do not breathe.

Please read Safety Data Sheet (SDS) for further safety information.

YAPIFINE HYDRA® SHOCK

Water Plugging Mortar

Product Description

Polymer reinforced single component waterproofing material that rapidly sets and is used in the insulation and repair of active water leaks.

TECHNICAL PROPERTIES

Appearance	Grey powder	Adhesion Strength to Underlayer	$\geq 1 \text{ N/mm}^2$
Pot Life	max. 1 minute	Flexural Strength	$\geq 4 \text{ N/mm}^2$
Final Drying	2 minutes	Compressive Strength	$\geq 25 \text{ N/mm}^2$
Application Temperature	Between +5°C and +30°C	Reaction to Fire	A1
Service Temperature	-20°C / +80°C		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Easy to apply.
- Rapid strength gain.
- Doesn't shrink.
- High compressive strength.
- By expanding in the opposite direction of the water flow rapidly sets and stops the water flow.
- Is chlorine-free, doesn't corrode the iron reinforcement.

Areas of Use

- Walls and floors
- Basements, foundations, shear walls and elevator shafts
- Water tanks and pools
- Insulation of water leaks in concrete pipes

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

Places where there are cracks, holes and active water leaks should be further opened all the way down to solid ground.

Mixture Preparation

An appropriate amount of the powder product, enough to allow the coverage of the area where the water leak is located, is poured into the container filled with enough fresh water in proportion to the needed amount to prepare the mixture. Since the product sets very quickly, an appropriate amount of the product is mixed and stirred in a fast manner inside a small bucket. (1 kg of powder / 270 ml of water)

If the amount of the leaking water is too much then the powder product is held against the water flow where the leak is located and is held against the flow until it hardens.

The mixture is stirred by hand or with a spatula until a homogeneous mixture is achieved. The stirring process shouldn't be longer than 30 seconds. Rubber gloves should be used throughout this process.

Application Information

Since the prepared mortar begins setting with the increase in temperature, it is swiftly given shape with hand and then with a single move it is held strongly against the area where the leak is coming from and is pressed against the leak by hand for at least 30 seconds.

Since the product sets quickly the process should be completed within 1 minute.

The application should start from the outer areas of the leak and move towards the center.

Leaks coming from deep holes can be insulated with more than one layers of application.

Application Conditions

Additional water should not be added to already frozen mortar or mortar that has finished its setting process.

The application area should be kept damp in order to keep it cool after the application procedure and it should be allowed to cure.

Since the product is not elastic, it should not be applied on dynamic cracks.

**Packaging**

- 3 kg plastic drum

Consumption

1.7-2 kg of powder for 1 l of fresh mortar

Storage and Shelf Life

The shelf life of the product is 6 months when stored in its original packaging in a dry (maximum relative humidity 60%), cool (ambient temperature between +10°C and +25°C) and moisture-free environment.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes or accidental ingestion of the product, seek immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

Since it's cement based, do not breathe.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE HYDRA® CRYSTAL

Cement Based Crystallized Waterproofing Material

Product Description

Cement based single component crystallized waterproofing material with a capillary effect which can be used on both negative and positive sides that provides waterproofing by permeating into the concrete.

TECHNICAL PROPERTIES

Appearance	Grey powder	Pressurised Water Strength	7 bars (Negative & positive side)
Application Temperature	Between +5°C and +35°C	Capillary Water Absorption	≤ 0,1 kg/(m².h0,5)
Pot Life	20 minutes	Water Vapour Permeability	Class I; Sd < 5
Time Before Use	5 days	Reaction to Fire	A1
Concrete Adhesion Resistance	≥ 0,8 N/mm²		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Provides waterproofing by being applied to concrete surfaces on both positive and negative sides and protects the concrete from the harmful effects of water.
- The mixture that is prepared by mixing the product with water only, reacts with the free lime particles on the concrete surface. The crystals formed diffuse into the concrete and by filling the capillary gaps provides waterproofing.
- When applied on fresh concrete surfaces slows down the hydration process and reduces the cracks formed by shrinkage.
- Is permeable to water vapor.
- Is resistant to the freeze-thaw cycle.
- Protects both the concrete and the reinforcement from the corrosive effects of water.

Areas of Use

- On both horizontal and vertical applications
- To provide waterproofing on the exposed concrete surfaces of all buildings
- Elevator pits
- Foundation and basement walls
- To provide waterproofing on both the negative and the positive sides of both old and new structurally intact concrete surfaces.
- Waterproofing for both underground and aboveground structures
- Water tanks and swimming pools
- Irrigation canals
- Elevator shafts, tunnels and metros

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

The damaged parts of the concrete, fractures and static cracks on the surface should be repaired with the appropriate YAPIFINE MEND repair mortar first.

Water infiltration should be eliminated with the usage of YAPIFINE HYDRA SHOCK.

Sharp corner and edge joints should be chamfered.

The application surface should be saturated with water, the saturation procedure should begin 24 hours before the application and the surface should be kept wet during the application as well. Make sure there are no water puddles on the surface.

Mixture Preparation

20 kg of powder is slowly added to 6-7 liters of clean water until a homogeneous mixture is achieved. During this process the mixture should be stirred with a low-speed mixer for a minimum of 5 minutes.

No foreign additives should be added to the mixture other than the ones specified in the application instructions.

Prepared mortar is left to develop for 3 minutes and is then mixed once again after which the mortar is ready to be applied.

The mixture inside the container should be used within 20 minutes.



Application Information



WET MORTAR: Prepared mortar, is applied on the surface which has had its underlayer preparation finished and is already saturated with water with a brush, a trowel or with a spray machine in a minimum of 2 layers.

It should be made sure of that the layers are homogeneous, smooth and even. The application should be done in the same direction on any specific layer. When the first layer finishes drying the second layer can be applied. The layers should be applied perpendicular to each other. 4-8 hours should pass between the application of the layers.

After the application the surface should be protected from rain and frost for 24-48 hours. As it is in the normal curing process of the concrete HYDRA CRYSTAL should also be prevented from immediately drying, in order not to let it dry off, the application area should be kept wet with water 3 times a day for 5 days.

DRY COATING (negative side): Once the freshly poured concrete somewhat sets itself in place, it is simply coated with YAPIFINE HYDRA CRYSTAL.

DRY COATING (positive side): Right before the pouring of the concrete the surface is simply coated with YAPIFINE HYDRA CRYSTAL and the concrete is poured on top of it.

Application Conditions

Application shouldn't be done on surfaces that were exposed to direct sunlight for too long, surfaces that are too hot or surfaces that are frozen.

Optimal ambient temperature is between +5°C and +30°C, if the temperature is not within these limits, then the application shouldn't take place.

The application area should be protected from the wind or direct sunlight during the application process.

The final consumption amount might vary depending on application conditions and surface characteristics.

The application area becomes completely waterproof between 5-7 days. In order to achieve the desired and predicted long-term performance results, it is recommended to cover the surface with an appropriate and desired coating material after the application.

Packaging

- 20 kg kraft bag

Consumption

~2 kg/m² for two layers of application
Mixture ration: 6-7 l water/20 kg powder

Storage and Shelf Life

The shelf life of the product is 12 months when stored in its original packaging in dry (maximum relative humidity 60%), cool (ambient temperature between +10°C and +25°C) and moisture-free environment.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes or accidental ingestion of the product, seek immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

Since it's cement based, do not breathe.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE HYDRA® ACRYLIC

Elastomeric Acrylic Resin Based Flexible Waterproofing Material

Product Description

Elastomeric acrylic resin based, elastic, ready-to-use one component waterproofing material.

TECHNICAL PROPERTIES

Appearance	White liquid	Time Period Between Layers	5 hours
Density	1.50 kg/L $\pm$ 0.03	Adhesive Strength	$\geq$ 1 N/mm ²
pH	8 $\pm$ 1	Water Vapour Transmission Rate	$\geq$ 0,6 g/(h.cm ²)
Application Temperature	Between +5°C and +30°C	Water Transmission Rate	< 0,1 kg/(m ² .h ^{0.5})
Service Temperature	-25°C / + 80°C	Crack Bridging	> 2,5 mm
Time Before Use	min. 3 days	Elasticity	% 200-300
Time Required to Attain Final Strength	14 days	Reaction to Fire	Ds1d0
Time Required to Become Waterproof	7 days		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23 $\pm$ 2°C temperature with relative humidity of %50 $\pm$ 5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Ready-to-use.
- Elastic.
- Adheres well on surfaces due to its high adherence strength.
- Provides a coating without any joints or junctures.
- Allows the concrete to breathe due to its structure permeable to water vapor.
- Provides exceptional protection against carbonation.
- Solvent-free and nontoxic.
- Can easily be applied with a brush or a roller.

Areas of Use

- Indoors and outdoors both
- In both vertical and horizontal applications
- Streams and gutters
- Edges of chimneys
- Wet areas such as bathrooms and kitchens
- Inclined terrace roofs
- Metal surfaces such as iron, steel, galvanized sheet and aluminum

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

The damaged parts of the concrete, fractures and static cracks on the surface should be repaired with the appropriate YAPIFINE MEND repair mortar first.

Water infiltration should be eliminated with the usage of YAPIFINE HYDRA SHOCK. Dynamic cracks should be filled with YAPIFINE GOOP HYBRID or YAPIFINE GOOP sealant.

Sharp corner and edge joints should be chamfered.

The application surface should be saturated with water, the saturation procedure should begin 24 hours before the application and the surface should be kept wet during the application as well. Make sure there are no water puddles on the surface.

Application Information



The product is applied to the surface in a minimum of 2 layers with a brush without dilution. The film thickness on each layer should be between 1-1.5 mm. The layers should be homogeneous, smooth and even and the application should be done in the same direction on each specific layer. Once the first layer finishes drying the second layer can be applied. 6 hours should pass after the application of the first layer so that the second layer can be applied. After a layer's application, when a hand inspection is done on the layer and there are no traces left on the fingers then the second layer can be applied. In order to achieve a greater carrying property it is recommended to use waterproofing nets and felts in-between the layers. The material becomes waterproof 7 days after its application.



Application Conditions

Is not suitable for use in water tanks, swimming pools and foundations. Metal surfaces and surfaces with old bitumen should be primed with synthetic primer. Not applicable to wet and damp floors. Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen.

Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

The application area should be protected from the effects of wind and direct sunlight.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 20 kg plastic drum

Consumption

1.50 kg/m² per layer.

Should be applied as two layers minimum.

Storage and Shelf Life

The shelf life of the product is 12 months when stored in its original packaging in dry (maximum relative humidity 60%), cool (ambient temperature between +10°C and +25°C) and moisture-free environment.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes or accidental ingestion of the product, seek immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

Since it's cement based, do not breathe.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE HYDRA® ACRYLIC UV

Elastomeric Acrylic Resin Based Super Flexible UV-Resistant Waterproofing Material

Product Description

Elastomeric acrylic resin based, super elastic, UV-Resistant one component waterproofing material.

TECHNICAL PROPERTIES

Appearance	White liquid	Waiting Period Between Layers	6 hours
Density	1.35 kg/L $\pm$ 0.03	Adhesive Strength	$\geq$ 1 N/mm ²
pH	8 $\pm$ 1	Water Vapour Transmission Rate	< 0,6 g / (h.cm ²)
Application Temperature	Between +5°C and +30°C	Water Transmission Rate	< 0,1 kg / (m ² .h ^{0.5})
Service Temperature	-25°C / + 80°C	Crack Bridging	+21°C < 0,1 kg / (m ² .h ^{0.5}) -10°C < 0,1 kg / (m ² .h ^{0.5})
Time Before Use	min. 3 days	Pressurised Water Strength	5 Bar Positive
Time Required to Gain Final Strength	14 days	Elasticity	500-700 %
Time Required to Become Waterproof	7 days		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23 $\pm$ 2°C temperature with relative humidity of %50 $\pm$ 5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Ready-to-use.
- Super elastic.
- UV-resistant.
- Adheres well on surfaces due to its high adherence.
- Can be overpainted.
- Provides a coating without any joints or junctures.
- Allows the concrete to breathe due to its structure permeable to water vapor.
- Provides excellent protection against carbonation.
- Solvent-free, nontoxic.
- Can easily be applied with both a brush or a roller.

Areas of Use

- Indoors and outdoors both
- Horizontal and vertical applications
- Water tanks, swimming and decorative pools
- Inclined terrace roofs
- Precast surfaces
- Streams and gutters
- Edges of chimneys
- Wet areas such as bathrooms and kitchens
- Metal surfaces such as iron, steel, galvanized sheet and aluminum

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

The damaged parts of the concrete, fractures and static cracks on the surface should be repaired with the appropriate YAPIFINE MEND repair mortar first.

Water infiltration should be eliminated with the usage of YAPIFINE HYDRA SHOCK. Dynamic cracks should be filled with YAPIFINE GOOP HYBRID or YAPIFINE GOOP sealant.

Sharp corner and edge joints should be chamfered.

The application surface should be saturated with water, the saturation procedure should begin 24 hours before the application and the surface should be kept wet during the application as well. Make sure there are no water puddles on the surface.

It is recommended to use YAPIFINE UNI PRIME for a primer application on absorbant surfaces.

Application Information



The product is applied to the surface in a minimum of 2 layers with a brush without dilution. The film thickness on each layer should be between 1-1.5 mm. The layers should be homogeneous, smooth and even and the application should be done in the same direction on each specific layer. Once the first layer finishes drying the second layer can be applied. 6 hours should pass after the application of the first layer so that the second layer can be applied. After a layer's application, when a hand inspection is done on the layer and there are no traces left on the fingers then the second layer can be applied. In order to achieve a greater carrying property it is recommended to use waterproofing nets and felts in-between the layers. The material becomes waterproof 7 days after its application.



Application Conditions

Metal surfaces and surfaces with old bitumen should be primed with synthetic primer. Not applicable to wet and damp floors. Is not suitable for use in foundations. Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen. Should not be applied when the ambient temperature is not within the values of +5°C and +30°C. The application area should be protected from the effects of wind and direct sunlight. The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ 20 kg plastic drum

Consumption

1.5 kg/m² per layer.

Should be applied in a minimum of 2 layers.

Storage and Shelf Life

The shelf life of the product is 12 months when stored in its original packaging in dry (maximum relative humidity 60%), cool (ambient temperature between +10°C and +25°C) and moisture-free environment.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes or accidental ingestion of the product, seek immediate medical attention. Rinse with plenty of water in case of contact with the skin. Since it's cement based, do not breathe. For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE HYDRA® BITUMEN

Bitumen Based Waterproofing Material

Product Description

Bitumen based, elastic, polymer modified one component thick waterproofing material that can only be used on its positive side.

TECHNICAL PROPERTIES

Colour	Black	Contact with Water	48 hours
Density	1.10 kg/L $\pm$ 0.03	Crack Bridging	2 mm
pH	11.50 - 12.50	Resistance to Rain	R1
Application Temperature	Between +5°C to +30°C	Impermeability to Water	W1
Pot Life	1 - 2 hours	Resistance to Pressure	C2B
Drying Time	min. 48 hours	Reaction to Fire	E

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23 $\pm$ 2°C temperature with relative humidity of %50 $\pm$ 5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Easy to apply.
- Solvent-free.
- Provides a waterproof coating without any joints.
- Adheres well to surfaces due to its high adherence.
- Has a crack bridging property.
- Is applied cold, dries rapidly.
- Is not subject to sagging in vertical applications.

Areas of Use

- Both indoors and outdoors
- Horizontal and vertical surfaces
- Foundation and shear walls
- Wet locations, retaining walls
- For the purposes of protecting and insulating the constructions and construction elements under the influence of constant or temporary water pressure
- Can be used in the adhesion of tiles used for insulation or drainage purposes. Since it is not resistant to UV, the product should be appropriately covered after application

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

The damaged parts of the concrete, fractures and static cracks on the surface should be repaired with the appropriate YAPIFINE MEND repair mortar first.

Water infiltration should be eliminated with the usage of YAPIFINE HYDRA SHOCK. Dynamic cracks should be filled with YAPIFINE GOOP HYBRID or YAPIFINE GOOP sealant.

Sharp corner and edge joints should be chamfered.

The application surface should be primed with a solvent-free bitumen primer and the application should begin once the primer is completely dry.

Lining

The product can be diluted with water with a 1/5 ratio after which it can be used for the priming procedure.

The material should be distributed evenly with a suitable brush and applied without material accumulation on surface.

The actual application should begin after the primer has finished drying/setting.

The recommended usage ratio is 0.25 kg/m².



Application Information



Should be applied with an appropriate brush, trowel or spraying machine in a minimum of 2 layers.

In order to apply the second layer, the first layer needs to finish drying first.

The second layer should be applied perpendicular to the first layer.

It is recommended to use waterproofing mesh or seal between the layers in order to improve the carrying capacity of the product.

Until through-dry state is achieved the foundation pit should not be closed. After the cover is protected with the appropriate thermal insulation and drainage plates, a filler application should be applied as well.

The tools used should be rinsed off with water before they dry. In case the material on the tools have already dried, solvent can be used in order to clean them.

Application Conditions

Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

While it is raining or there is a risk of rain, the application should not take place.

The application area should be protected from the effects of wind and direct sunlight. Avoid applications in areas that are affected by direct sunlight or wind or areas that are in risk of a freeze in the next 24 hours after application.

Application should be done on the part of the construction that is in contact with water.

Since the material will take longer to cure in cold weather, the second layer should be applied only after the first layer finishes drying/setting.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 18 kg plastic bucket

Consumption

Total consumption for 2 coats of application is provided in the table below.

Areas of Use	Dry Film (mm)	Consumption (kg)
Areas exposed to floor humidity	3 mm	4,5 kg/m ²
Insulation against temporary pressurized water	3 mm	4,5 kg/m ²
Areas permanently subject to pressurized water	4 mm	5,5 kg/m ²

* Recommended to use glass fibre reinforcement between layers.

Storage and Shelf Life

The shelf life of the product is 12 months when stored in its original packaging in dry (maximum relative humidity 60%), cool (ambient temperature between +10°C and +25°C) and moisture-free environment.

Should be stored without putting palettes on top of each other.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

In case of accidental ingestion of the product seek immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

Since it's cement based, do not breathe.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE HYDRA® BITUMEN 2C

Bitumen Rubber Based Two Component Waterproofing Material

Product Description

Bitumen rubber based polymer modified elastic two component waterproofing material that is only available for use on its positive side.

TECHNICAL PROPERTIES

Colour	Brown (black upon drying)	Contact with Water	48 hours
Density	1.13 kg/L $\pm$ 0.03	Crack Bridging	2 mm
pH	11.50 - 12.50	Resistance to Rain	R1
Application Temperature	Between +5°C to +30°C	Impermeability to Water	W1
Pot Life	1 - 2 hours	Resistance to Pressure	C2B
Drying Time	min. 24 hours	Reaction to Fire	E

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23 $\pm$ 2°C temperature with relative humidity of %50 $\pm$ 5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Easy to apply.
- Solvent-free.
- Provides a waterproof coating without any joints.
- Adheres well to surfaces due to its high adherence.
- Has a crack bridging property.
- Is applied cold, dries rapidly.
- Is not subject to sagging in vertical applications.

Areas of Use

- Both indoors and outdoors
- Horizontal and vertical surfaces
- Foundations and shear walls
- Wet locations, retaining walls
- For the purposes of protecting and insulating the constructions and construction elements under the influence of constant or temporary water pressure
- Can be used in the adhesion of tiles used for insulation or drainage purposes. Since it is not resistant to UV, the product should be appropriately covered after application

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

The damaged parts of the concrete, fractures and static cracks on the surface should be repaired with the appropriate YAPIFINE MEND repair mortar first.

Water infiltration should be eliminated with the usage of YAPIFINE HYDRA SHOCK. Dynamic cracks should be filled with YAPIFINE GOOP HYBRID or YAPIFINE GOOP sealant.

Sharp corner and edge joints should be chamfered.

The application surface should be primed with a solvent-free bitumen primer and the application should begin once the primer is completely dry.

Mixture Preparation

The powder component should be slowly added to the liquid component in a medium speed mixer, at a speed of around 400-600 rpm, until a homogeneous mixture is obtained.

The mixture should be consumed within 1-2 hours.



Application Information



Should be applied with an appropriate brush, trowel or spraying machine in a minimum of 2 layers.

In order to apply the second layer, the first layer needs to finish drying first.

The second layer should be applied perpendicular to the first layer.

It is recommended to use waterproofing mesh or seal between the layers in order to improve the carrying capacity of the product.

Until through-dry state is achieved the foundation pit should not be closed. After the cover is protected with the appropriate thermal insulation and drainage plates, a filler application should be applied as well.

The tools used should be rinsed off with water before they dry. In case the material on the tools have already dried, solvent can be used in order to clean them

Application Conditions

Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

While it is raining or there is a risk of rain, the application should not take place.

The application area should be protected from the effects of wind and direct sunlight. Avoid applications in areas that are affected by direct sunlight or wind or areas that are in risk of a freeze in the next 24 hours after application.

Application should be done on the part of the construction that is in contact with water.

Since the material will take longer to cure in cold weather, the second layer should be applied only after the first layer finishes drying/setting.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- Plastic bucket of 32 kg (Component A: 24 kg + Component B: 8 kg)

Consumption

Total consumption for 2 coats of application is provided in the table below.

Areas of Use	Dry Film (mm)	Consumption (kg)
Areas exposed to floor humidity	3 mm	4,5 kg/m ²
Insulation against temporary pressurized water	3 mm	4,5 kg/m ²
Areas permanently subject to pressurized water	4 mm	6 kg/m ²

* Recommended to use glass fibre reinforcement between layers.

Storage and Shelf Life

The shelf life of the product is 12 months when stored in its original packaging in dry (maximum relative humidity 60%), cool (ambient temperature between +10°C and +25°C) and moisture-free environment.

Should be stored without putting palettes on top of each other.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

In case of accidental ingestion of the product seek immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

Since it's cement based, do not breathe.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE HYDRA® BITUMEN PU 2C

Bitumen-Polyurethane Based Two Component Liquid Waterproofing Membrane

Product Description

Rapidly curing polyurethane based elastic two component liquid waterproofing material that also includes bitumen that is applied cold.

TECHNICAL PROPERTIES

Colour	Black	Adherence on Concrete	≥ 2 N/mm ²
Brightness	Semi-gloss	Tensile Strength	≥ 2 N/mm ²
Mixture Ratio	1/1 (Component A / Component B)	Rupture-Expansion Percentage	≥ 2000 %
Pot Life (+20°C)	30 minutes	Hardness (Shore A)	35
Density (+20°C)	1 g/cm ³ ± 0.02	QUV	1000 hours
Viscosity (+25°C)	3000 – 3500 cP (A+B)	Crack Bridging	CB2
Application Temperature	Between +5°C to +35°C	Resistance to Rain	R1
Temperature Resistance	200 days at +80°C Dry sudden heat at +150°C	Impermeability	W1
Drying Period (at +23°C, 55% relative humidity)	Drying Time: 2 hours Time for New Coat: 6-24 hours Through-dry Time: 7 days	Resistance to Pressure	C2B
		Reaction to Fire	E

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Easy to apply.
- Adheres perfectly to almost any surface with or without a primer application creating a film of high elasticity.
- Never causes water leakage in application area.
- High elasticity.
- Rapid curing.
- Resistant against dead water and frost.
- Prevents water vapour.
- Has crack bridging property.
- In a vast range of heat, heat resistance performance is between -40°C and +90°C.
- Resistant against cold. Film maintains elasticity up to -40°C.
- Ensures effective resistance against chemicals.
- Also applicable as joint material.
- Perfect mechanic features; high tensile, tear and abrasion resistances.

Areas of Use

- Water tanks (except for drinking water reservoirs)
- Floors
- Foundations
- Bridge platforms
- Cut-and-cover tunnels
- Underneath the tiles in bathrooms, terraces and roofs
- Concrete buildings
- Retaining walls
- Plaster and cement boards
- On EPDM and asphalt membranes
- Lighter roofs (made of metal or fibrous cement)
- Green terraces and roofs

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

The damaged parts of the concrete, fractures and static cracks on the surface should be repaired with the appropriate YAPIFINE MEND repair mortar first.

Water infiltration should be eliminated with the usage of YAPIFINE HYDRA SHOCK. Dynamic cracks should be filled with YAPIFINE GOOP HYBRID or YAPIFINE GOOP sealant.

Sharp corner and edge joints should be chamfered.

If possible, the surface should be washed with highly pressurized water and then dried off.



Lining

YAPIFINE HYDRA PU PRIME or YAPIFINE BASE EPOXY PRIME should be used for absorbent surfaces such as concrete, cement, screed, wood. (humidity should be max 5% on these surfaces). YAPIFINE BASE EPOXY PRIME H should be used as primer on moisturized surfaces instead. YAPIFINE HYDRA PU TILE PRIME should be used on non-absorbent surfaces such as metal, ceramic or old coating. Application is done with a brush or a roller. The resting time between the layers should not exceed 48 hours. In case 48 hour-limit is exceeded and you are not sure about the adhesion performance then YAPIFINE HYDRA PU PRIME should be used instead.

Mixture Preparation

After each component is stirred in its own container with a low speed mixer they are then mixed together. The mixed components A and B are then stirred for a few more minutes together with a low speed mixer and are then prepared for use. Pot life of the mixture is between 30-35 minutes at 20 °C. The pot life of the mixture is directly proportional to the change in ambient temperature.

Application Information



The mixture is poured onto the surface and is then applied in a minimum of 2 layers with a brush, scraper or roller until the whole surface is covered.

The second layer should be applied 12 at minimum and 24 hours at maximum after the application of the first player. The resting time between the layers should not exceed 48 hours.

The tools used during the application should be cleaned within 2 hours after the application.

Also applicable as one thick layer. Should be applied with a usage of 1.5 – 2 l/m².

Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen.

Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

The application area should be protected from the effects of wind and direct sunlight.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ Tin bucket of 20 kg + 20 kg

Consumption

Minimum 0.75 – 1 l/m² for each layer. Applied in a minimum of two layers. Total theoretical consumption is 1.5 – 2 l/m².

Storage and Shelf Life

The shelf life of the product is 12 months when stored on wooden pallets in its original packaging in dry (maximum relative humidity 60%), cool (ambient temperature between +5°C and +25°C) and moisture-free environment.

Safety Precautions

No smoking should take place during application.

The work environment should be well ventilated and should not include any open flames.

Since the solvents are heavier than air it should be remembered that they will be in circulation over the floor.

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

In case of accidental ingestion of the product seek immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE HYDRA® PU UV

Polyurethane Based Liquid Waterproofing Membrane

Product Description

Polyurethane based, low-viscosity, UV-resistant, one component, elastic liquid membrane that cures with the ambient moisture which can be used for waterproofing and protection purposes.

TECHNICAL PROPERTIES

Colour	White / Grey	Hardness (Shore A)	60
Density (+20°C)	1.40 g/cm ³ ± 0.03	Capillary Absorption and Permeability to Water	0.80 g/(m ² .h ^{0.5})
Viscosity (+25°C)	10-50 cP	Permeability to Water Vapour	Class 1
Application Temperature	Between +5°C to +40°C	Rupture-Expansion Percentage	≥ % 600
Drying Period (at +23°C, 55% relative humidity)	Drying Time: 4 hours Time for New Coat: 6-24 hours Through-dry Time: 4 days	Tensile Strength	≥ 8 N/mm ²
		Adhesive Strength to Concrete	≥ 2 N/mm ²
		Reaction to Fire	B2

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- UV-resistant.
- Ready to use.
- Easy to apply (with brush or roller).
- Excellent adhesion to any surface.
- Curing with humidity in air ensures elastic and durable film.
- Prevents leakage since it does not create joints.
- Effective permeability to water vapor allows the surface to breathe hence preventing the moisture accumulation.
- Even if membrane is damaged in any manner, the damaged part can be easily repaired in a short time.
- Is resistant to water and other chemical materials.

Areas of Use

- Indoors and outdoors applications
- Terraces and balconies
- Areas beneath coating (wet areas, bathrooms)
- Parking lots, stadium floors
- Uncovered roofs

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

If possible, the surface should be washed with highly pressurized water and then dried off.

The damaged parts of the concrete, fractures and static cracks on the surface should be repaired with the appropriate YAPIFINE MEND repair mortar first.

The moisture of the application surface should not be more than 5%. YAPIFINE EPOXY PRIME H should be used on surfaces with a high moisture level. For absorbent surfaces such as concrete, screed and wooden surfaces YAPIFINE HYDRA PU PRIME should be used.

For non-absorbent surfaces such as metal, ceramic or old coatings YAPIFINE HYDRA PU TILE PRIME should be used.

Mixture Preparation

Before use, unpack and blend for a few minutes with a low-speed mixer. Ready to use, thinning not recommended.

Application Information



Apply the mixture on primed surface with a brush or a roller in a minimum of two layers. The second layer should be applied between a minimum of 4 hours and a maximum of 24 hours after the application of the first layer.



Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen. Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

The application area should be protected from the effects of wind and direct sunlight. The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 25 kg tin drum

Consumption

Minimum 0.75–0.90 kg/m² for each layer. Apply in two coats minimum. Total theoretical consumption is 1.5–1.8 kg/m².

Storage and Shelf Life

The shelf life of the product is 12 months when stored on wooden pallets in its original packaging in dry (maximum relative humidity 60%), cool (ambient temperature between +5°C and +25°C) and moisture-free environment.

The unpacked material should be used as soon as possible.

Safety Precautions

No smoking should take place during application. The work environment should be well ventilated and should not include any open flames. Since the solvents are heavier than air it should be remembered that they will be in circulation over the floor. The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention. In case of accidental ingestion of the product seek immediate medical attention. Rinse with plenty of water in case of contact with the skin. For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE HYDRA® PU CLEAR

Polyurethane Based Transparent Liquid Waterproofing Membrane

Product Description

Aliphatic polyurethane based, transparent, one component, liquid waterproofing membrane.

TECHNICAL PROPERTIES

Colour	Transparent	Hardness (Shore D)	40
Density (+20°C)	1 g/cm ³ ± 0.03	Rupture-Expansion Percentage	≥ % 350
Viscosity (+25°C)	1500 ± 100 cP	QUV	3000 hours
Service Temperature	100 days at +80°C Dry sudden heat at +200°C	Tensile Strength	≥ 35 N/mm ²
Drying Period (at +23°C, 55% relative humidity)	Drying time: 6 hours Time for new coat: 8-24 hours Through-dry time: 7 days	Adhesive Strength to Concrete	≥ 2 N/mm ²
		Reaction to Fire	B2

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Perfect mechanical features.
- High UV-resistance.
- Cures with humidity in air. Adheres on surfaces without interruption, ensuring a transparent, durable and elastic film.
- Perfect resistance against bad weather.
- Easy to apply (with roller or brush).
- Able to withstand constant contact with water without any problems due to its pure polyurethane structure.
- Preserves mechanical features in temperatures from -40°C to +80°C.
- High adhesive strength.
- Alkali and chemical resistance. Preserves transparency and elasticity after years.

Areas of Use

- Terraces
- Verandas and balconies
- Concrete and natural stone surfaces
- Glass surfaces
- Ceramic surfaces

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

The damaged parts of the concrete, fractures and static cracks on the surface should be repaired with the appropriate YAPIFINE MEND repair mortar first.

Water infiltration should be eliminated with the usage of YAPIFINE HYDRA SHOCK. Dynamic cracks should be filled with YAPIFINE GOOP HYBRID or YAPIFINE GOOP sealant.

Sharp corner and edge joints should be chamfered.

If possible, the surface should be washed with highly pressurized water and then dried off.

Lining

YAPIFINE HYDRA PU TILE PRIME should be used on polished non-absorbent surfaces such as polished ceramic tiling, glass and glass bricks. YAPIFINE HYDRA PU TILE PRIME should be applied with a cloth and the lining should be carried out without any flaws.

Mixture Preparation

The product should be opened and stirred with a low speed mixer in its packaging for a few minutes before use.



Application Information



The mixture is poured onto the surface and is then applied in a minimum of 2 layers with a brush or a roller until the whole surface is covered. The second layer should be applied 8 at minimum and 24 hours at maximum after the application of the first player. The resting time between the layers should not exceed 48 hours. The tools used during the application should be cleaned within 2 hours after the application.

Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen. Should not be applied when the ambient temperature is not within the values of +5°C and +35°C.

The application area should be protected from the effects of wind and direct sunlight.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 1-5 kg tin drum

Consumption

0,200 - 0,500 l/m² for each layer. Apply in a minimum of two layers. Total theoretical consumption is 0.2 - 1 l/m².

Storage and Shelf Life

The shelf life of the product is 9 months when stored on wooden pallets in its original packaging in dry (maximum relative humidity 60%), cool (ambient temperature between +5°C and +25°C) and moisture-free environment.

The unpacked material should be used as soon as possible.

Safety Precautions

No smoking should take place during application. The work environment should be well ventilated and should not include any open flames. Since the solvents are heavier than air it should be remembered that they will be in circulation over the floor. The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention. Rinse with plenty of water in case of contact with the skin. For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE HYDRA® SERUM

Polyurethane Based Injection Resin

Product Description

Polyurethane based, low viscosity, closed celled, water reactive, one component injection resin specially designed to stop pressurized and non-pressurized water flows leaking through cracks on concrete surfaces.

TECHNICAL PROPERTIES

		YAPIFINE SERUM INJ CATALYST	
Colour	Transparent yellow	Colour	Transparent yellow
Density (+20°C)	1.10 g/cm ³ ± 0.03	Density (+20°C)	0.95 g/cm ³ ± 0.01
Viscosity (+25°C)	~ 200 cP	Viscosity (+25°C)	~ 15 cP
Solid Matter	100 %	Application Temperature	+70°C
Flashpoint	145°C		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Resistant against weak acids, microorganisms, alkali and water.
- Ease of adjusting reaction time.
- Easy-to-apply.
- Hydrophobic.
- Low-viscosity; penetrates well into capillary cracks.
- Solvent free.
- Reacts with water to stop leakage.

Areas of Use

- Foundations, retention walls, cracked walls
- Water tanks, dams, tunnels and subways
- Wastewater and sewage systems
- Storehouses
- Filling layers and joints

Surface Preparation

All the free particles present in the cracks and joints on the surface where the injection will be made should be cleaned. Cracks larger than 3 mm should be repaired with an appropriate repair mortar. The locations of the pakers (injectors) are determined according to where and how the leak was coming through. The pakers (injectors) are placed at a 45 degree angle. Pakers (injectors) should be nailed all the way into half the length of the concrete thickness. The distance between the pakers (injectors) should be between 15 cm to 90 cm. The insides of the holes should be dust free.

Mixture Preparation

YAPIFINE SERUM INJ CATALYST is thoroughly mixed before use. YAPIFINE SERUM is then mixed with the given amount of catalyst and becomes ready to use. The amount of catalyst should be adjusted according to the cracks and the water's flowing rate as well as the weather conditions at the site of the application. The catalyst can be used with a ratio between 2% - 10%. The required amount of mixture should be prepared and then should be applied without delay.

Application Information



Applied with a single component injection pump into the prepared pakers (injectors). The application pressure varies between 14 and 200 bars. Application should begin with the first paker (injector). A starting at low, the pressure is increased until resin overflows. When the resin overflows, the application moves on to the next paker (injector). During the injection application the resin that is injected from all pakers (injectors) will begin overflowing from the cracks on the concrete. After this procedure, the application is finalized. In the application of YAPIFINE SERUM, the consumption amount is proportional to the cracks and holes that need to be completely filled.



Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen.

Should not be applied when the ambient temperature is not within the values of +5°C and +35°C.

The application area should be protected from the effects of wind and direct sunlight.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- Tin bucket set of 20 kg + 2 kg

Storage and Shelf Life

The shelf life of the product is 12 months when stored on wooden pallets in its original packaging in dry (maximum relative humidity 60%), cool (ambient temperature between +5°C and +25°C) and moisture-free environment.

The unpacked material should be used as soon as possible.

Safety Precautions

No smoking should take place during application.

The work environment should be well ventilated and should not include any open flames.

Since the solvents are heavier than air it should be remembered that they will be in circulation over the floor.

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE HYDRA® PU PRIME

Polyurethane Based Primer

Product Description

Polyurethane based, one component, transparent primer.

TECHNICAL PROPERTIES

Colour	Transparent	Drying Period (at +23°C, 55% relative humidity)	Drying Time: 1 hour Time for New Coat: 4 hours Through-dry Time: 4 days
Density (+20°C)	1.01 g/cm ³ ± 0.03	Hardness (Shore A)	95
Viscosity (+25°C)	10 - 50 cP	Adhesive Strength to Concrete	≥ 2,2 N/mm ²
Application Temperature	Between +5°C to +40°C	Reaction to Fire	B2

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Ready to use.
- Adheres perfectly to all kinds of surface.
- Easy to apply.
- Resistant to chemical materials and water.
- Ensures perfect junction with absorptive surfaces.
- Dries quickly.
- Spreads and impregnates on surface homogeneously.
- By providing a surface preparation for the materials that will be applied on itself, provides excellent adherence.

Areas of Use

- Concrete that emits dust, plaster and gypsum surfaces
- Wood surfaces
- Provides surface preparation before all kind of polyurethane based floor material applications

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

If possible, the surface should be washed with highly pressurized water and then dried off.

The damaged parts of the concrete, fractures and static cracks on the surface should be repaired with the appropriate YAPIFINE MEND repair mortar first.

Mixture Preparation

Should be mixed with a low speed mixer after opening its packaging for a few minutes before use.

Is ready to use, thinning is not required.

Application Information



The application surface is completely covered with a brush or a roller.

On large surfaces, the application can be done with an airless spray.

Other applications can take place 4 hours after the product's application.

Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen.

Should not be applied when the ambient temperature is not within the values of +5°C and +35°C.

The application area should be protected from the effects of wind and direct sunlight.

The final consumption amount might vary depending on application conditions and surface characteristics.

**Packaging**

■ 20 kg tin drum

Consumption

100-150 g/m²

Storage and Shelf Life

The shelf life of the product is 12 months when stored on wooden pallets in its original packaging in dry (maximum relative humidity 60%), cool (ambient temperature between +5°C and +25°C) and moisture-free environment.

The unpacked material should be used as soon as possible.

Safety Precautions

No smoking should take place during application.

The work environment should be well ventilated and should not include any open flames.

Since the solvents are heavier than air it should be remembered that they will be in circulation over the floor.

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE HYDRA® PU TILE PRIME

Polyurethane Based Non-Porous Surface Primer

Product Description

Highly adhesive primer specially designed to ensure adhesion of polyurethane waterproofing membranes on non-porous surfaces such as ceramic.

TECHNICAL PROPERTIES

Colour	Transparent	Drying Period (at +23°C, 55% relative humidity)	Drying time: 10 – 15 minutes
Density (+20°C)	0.8 g/cm ³ ± 0.03	Reaction to Fire	B2
Viscosity (+25°C)	40 – 50 cP		
Application Temperature	Between +5°C to +40°C		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Easy to apply.
- Dries quickly.
- Does not require thinning.
- Perfect adherence to non-absorptive surfaces such as glass, ceramic.
- Serves as adhesion bridge.

Areas of Use

- Surfaces such as natural stone, marble, ceramic
- Glass
- Glass-brick
- Glazed tile

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

If possible, the surface should be washed with highly pressurized water and then dried off.

The damaged parts of the concrete, fractures and static cracks on the surface should be repaired with the appropriate YAPIFINE MEND repair mortar first.

Mixture Preparation

Should be mixed with a low speed mixer after opening its packaging for a few minutes before use.

Application Information

In small areas, is applied with a clean cloth onto the floor in an appropriate amount. It is left to dry/set for 10 to 15 minutes after which the final layer can be applied.

Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen.

Should not be applied when the ambient temperature is not within the values of +5°C and +35°C.

The application area should be protected from the effects of wind and direct sunlight.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 4 l tin drum

Consumption

Minimum 0.05 kg/m² for single coat. Total theoretical consumption is 0.05–0.08 kg/m².



Storage and Shelf Life

The shelf life of the product is 12 months when stored on wooden pallets in its original packaging in dry (maximum relative humidity 60%), cool (ambient temperature between +5°C and +25°C) and moisture-free environment.

The unpacked material should be used as soon as possible.

Safety Precautions

No smoking should take place during application.

The work environment should be well ventilated and should not include any open flames.

Since the solvents are heavier than air it should be remembered that they will be in circulation over the floor.

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE HYDRA® PVC MEMBRANE

PVC Membrane

Product Description

PVC-based, multilayered laminated membrane.

TECHNICAL PROPERTIES

Appearance	Yellow	Longitudinal Elongation	> 300 %
Length	20 m	Longitudinal Tensile Strength	> 17 N/mm ²
Width	2,10 m	Latitudinal Elongation	> 300 %
Thickness	1.5 and 2 mm	Latitudinal Breaking Elongation	> 13 N/mm ²
Tear Strength	> 180 N	Reaction to Fire	E
Composition Separation Resistance	> 200 N		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Long-lasting.
- Offers high mechanical impact resistance.
- Resistant against chemicals within potable and service water.
- Does not change colour or quality of water.
- Resistant against plant roots.

Packaging

- (20 m x 2.1 m) 42 m² roll

Areas of Use

- Building foundations and shear concrete
- Highway tunnels
- Reinforced concrete roofs
- Ballasted roofs
- Subway constructions
- Hangars
- Wet spaces
- Building dilatation systems

Storage and Shelf Life

Should be stored on wooden pallets in cool, dry and moisture-free environments with an ambient temperature of +10°C and +25°C.

Safety Precautions

No smoking should take place during application.

The product should be kept away from any open flames.

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE HYDRA® PVC MEMBRANE ROOF

Polyester Reinforced Roof Membrane

YAPIFINE



Product Description

Polyester reinforced, UV protected, TPO roof and terrace membrane.

TECHNICAL PROPERTIES

Appearance	White / Grey	Joint Shear Resistance	> 800 N
Length	20 m	Longitudinal Elongation	< 15 %
Width	2.05 m	Longitudinal Tensile Strength	> 17 N/mm ²
Thickness	1.2 ve 1.5 mm	Latitudinal Elongation	< 15 %
Tear Strength	> 180 N	Latitudinal Breaking Elongation	> 13 N/mm ²
Composition Separation Resistance	> 200 N	Reaction to Fire	E

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Long-lasting.
- Offers high mechanical impact resistance.
- Resistant against chemicals within potable and service water.
- Does not change colour or quality of water.
- Resistant against plant roots.
- UV-resistant.

Areas of Use

- All kinds of flat and sloping roofs that are exposed to sunlight
- Concrete and steel roofs
- Terraces
- Parapets
- Hidden creeks
- Used in sandwich panels

Packaging

- 1.2 mm: (20m x 2.05m) 41 m² roll
- 1.5 mm: (20m x 2.05m) 41 m² roll

Storage and Shelf Life

Should be stored on wooden pallets in cool, dry and moisture-free environments with an ambient temperature of +10°C and +25°C.

Safety Precautions

No smoking should take place during application.

The product should be kept away from any open flames.

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE HYDRA® PVC MEMBRANE WP

UV Resistant Water Pool Membrane

Product Description

It is a reinforced and unreinforced PVC membrane used in fields such as ponds, canals, water basins, dams, swimming pools, ornamental pools that are open to sun and other atmospheric effects.

TECHNICAL PROPERTIES

Appearance	Blue	Joint Shear Resistance	> 800 N
Length	20 m	Longitudinal Elongation	< 15 %
Width	2,05 m	Longitudinal Tensile Strength	> 17 N/mm ²
Thickness	1,2, 1,5 ve 2,0 mm	Latitudinal Elongation	< 15 %
Tear Strength	> 150 N	Latitudinal Breaking Elongation	> 13 N/mm ²
Composition Separation Resistance	> 200 N	Reaction to Fire	E

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Long-lasting.
- Offers high mechanical impact resistance.
- Resistant against chemicals within potable and service water.
- Does not change colour or quality of water.
- Resistant against plant roots.
- UV-resistant

Packaging

- 1,2 mm: (20 m x 2,05 m) 41 m² roll
- 1,5 mm: (20 m x 2,05 m) 41 m² roll
- 2,0 mm: (20 m x 2,05 m) 41 m² roll

Storage and Shelf Life

Should be stored on wooden pallets in cool, dry and moisture-free environments with an ambient temperature of +10°C and +25°C.

Safety Precautions

No smoking should take place during application.

The product should be kept away from any open flames.

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE HYDRA® BITUMEN MEMBRANE BAND

Aluminum Foil Coated Bitumen Membrane

YAPIFINE



Product Description

Bitumen based waterproofing tape that is applied cold and is coated with aluminum foil on its top side and is self-adhesive on its bottom side.

TECHNICAL PROPERTIES

Appearance	Grey / Red	Elongation at Break (MD/CD)	230 / 244 %
Length	10 m	Resistance to Tearing	NPD
Width	Between 10-60 cm	Resistance to Impact	NPD
Thickness	1.5 mm	Resistance to Static Loading	5 kg
Flexibility at Low Temperature	-25 °C	Joint Strength	195 N / 50 mm
Flow Resistance at Elevated Temperature	100 °C	Reaction to Fire	E
Tensile Strength (MD/CD)	300 / 260 N / 50 mm		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Long-lasting.
- Offers high mechanical impact resistance.
- UV-resistant.
- Can easily be applied on curved surfaces due to its flexible structure.
- Self adhesive.

Areas of Use

- Provides insulation by adhering onto any surface such as wood, metal, glass, plastic, plaster and concrete

Surface Preparation

Application surfaces should be dry.

The surfaces should be clean, firm and sturdy, bearing and free of any free particles.

The surface should be cleaned of all residual materials such as oil, grease, dirt, paint, cement grout, rust, mold oil, salt efflorescence and other foreign substances which might reduce the adherence.

It is recommended to use bitumen based primer for application on absorbent surfaces such as concrete, plaster and chipboard.

Application Information

The peelable film layer on one side of the tape is peeled off and the film is pressed firmly on the application surface. The tape should be pressed so that it makes full contact with the application surface at every point.

Packaging

- 10 m x 10-15-20-25-30-60 cm roll

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +5°C and +30°C

Safety Precautions

No smoking should take place during application.

After the application, protect the application surface from heavy traffic for the next 24 hours.

Avoid application where there is frost or there is a risk of frost.

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE HYDRA® BITUMEN MEMBRANE EASY

HDPE Coated Bitumen Membrane

Product Description

Bitumen based, HDPE coated, self-adhesive waterproofing membrane that is applied without the need for a hot air source or a welding torch. The silicone foil on the bottom surface is easily removed and provides permanent insulation.

TECHNICAL PROPERTIES

Appearance	Black	Tensile Strength (MD/CD)	300 / 260 N / 50 mm
Length	20 m	Elongation at Break (MD/CD)	230 / 244 %
Width	1 m	Resistance to Tearing	155 N
Thickness	1,5 mm	Resistance to Impact	150 mm
Weight	2 kg/m ²	Resistance to Static Loading	10 kg
Flexibility at Low Temperature	-25 °C	Joint Strength	195 N / 50 mm
Flow Resistance at Elevated Temperature	100 °C	Reaction to Fire	E

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Easy preparation and application.
- Does not require a welding torch or a hot air source.
- Has crack bridging property.
- Can easily be applied on curved surfaces due to its flexible structure.
- Self adhesive.
- It can be applied on vertical and horizontal surfaces.

Areas of Use

- Horizontal and vertical applications,
- Basic and curtain walls,
- Retaining walls,
- External insulation of water tanks,
- Insulation of basement and warehouses,
- Used in underground garages and parking areas.

Surface Preparation

Application surfaces should be dry.

The pointy ends on the surface should be rounded up with a spiral grinder and deep cracks should be filled up with an appropriate repair mortar.

Inner corners and edge joints should be chamfered.

It is recommended to use bitumen based primer on the application surface and the application should take place after the primer dries.

The surfaces that might reduce the adherence of the product should be roughened.

Application Information

After removing the silicon foil on the bottom surface, the product is ready for use.

The 50-100 cm part of the membrane is opened and 30-50 cm part of the protective paper is peeled off and then the membrane is laid.

Starting from the middle and going to the sides of the laid membrane, the adhesive surface is adhered to the surface with the help of a hard roller brush so that no air bubbles remain.

The protective tape left on the front is pulled from the bottom and rounded the membrane and the bonding process is continued along the line.

Since it is not a UV-resistant product, it should be covered appropriately after application.



Packaging

- 20 m x 1 m roll

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +5°C and +30°C.

Safety Precautions

No smoking should take place during application.

After the application, protect the application surface from heavy traffic for the next 24 hours.

Avoid application where there is frost or there is a risk of frost.

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE GOOP® LM

Low Modulus Polyurethane Based Sealant

Product Description

One-component, low modulus polyurethane based sealing material that is cured with atmospheric moisture.

TECHNICAL PROPERTIES

Appearance	White / Grey / Black	Full Strength	7 days
Density	1.15 kg/l ± 0.03	Elongation on Rupture	≥ 600 %
Application Temperature	Between +5°C and +30°C	Hardness (Shore A)	20 ± 5
Service Temperature	-30°C / +80°C	100 % Elongation Module	0.3 Mpa
Initial Curing	24 hours	Tensile Strength	6.5 N/mm
Mechanical Strength	48 hours		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Single component.
- Polyurethane based.
- Easy to apply with gun.
- Does not sag.
- Can be painted over.
- Resistant against water and weather conditions.
- Resistant against aging and UV rays.
- Maintains elasticity in varying weather temperatures.

Areas of Use

- Indoor and outdoor spaces
- Horizontal and vertical dilatation joints
- Surfaces of cement based construction materials, brick, ceramic, glass, wood, galvanized sheet, painted sheet
- Filling joints of building elements in construction industry
- Roof tiling
- Filling gaps between wall and joinery in assembly of PVC and wooden door and window joinery
- Joints of prefabricated elements

Surface Preparation

The surfaces should be clean, smooth, even and dry and weaker particles should be removed from the surface.

Avoid application on humid surfaces.

Before application the joints should be thoroughly cleaned with a wire brush, spiral or sandblasting. The joint space should be dusted by blowing air into it.

In order to keep the sealant from spreading around and to make it come out smoothly, a masking tape is used on the upper part of the joint, without the tape reaching the center of the joint. The joint width should not be less than 6 mm. The joint widths should be between 10-30 mm and the depth should be between 6-15 mm. (Approximate ratio: depth/width = 1/2). In order to adjust the aforementioned values, base material (polyethylene fuse etc.) should be used inside the joints.

Mixture Preparation

YAPIFINE GOOP LM is ready for use.

Application Information



The sealant sausage is placed into the sausage gun and is then moved forward by pulling on the trigger. The material is applied without allowing air to get into the joint.

In wide joints, in order to get the sealant to have contact with both the edges and the base, more than one application with the gun might be required.

The surface on a filled joint should be smoothened and evened with the joint spatula and the masking tapes should immediately be removed from the surface without deforming the shape of the joint.



Application Conditions

Ambient temperature: Between +5 °C and +30 °C.

Joint surfaces of application should be dry and free of moisture.

Make sure that the applied sealant adheres to the inner surfaces of the joints but not to the bases.

Varying surfaces and air temperatures may affect service and drying time.

After application, the area should be protected against adverse weather conditions such as direct sunlight, wind, high temperatures (above +50°C), rain and frost.

After application, clean the tools and equipments with an appropriate solvent.

Resistant against water, seawater, diluted alkalis, concrete group and water-based detergents. Not resistant against alcohol, organic acid, concentrated alkali and hydrocarbon fuel.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 600 ml sausage

Consumption

1.20-1.30 g/linear meter

Joint Width (mm)	Joint Depth (mm)	Joint Length (600 ml sausage/m)
10	8	7,5
15	8	5
20	10	3
25	12	2
30	15	1,33

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

During the application smoking should not take place and fires should not be lit.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

Product Description

One component, high modulus polyurethane based sealing material that is cured with atmospheric moisture.

TECHNICAL PROPERTIES

Appearance	White / Grey / Black	Full Strength	7 days
Density	1.15 kg/l ± 0.03	Elongation on Rupture	≥ 500 %
Application Temperature	Between +5°C and +30°C	Hardness (Shore A)	40 ± 5
Service Temperature	-30°C / +80°C	100 % Elongation Module	0.4 Mpa
Initial Curing	2 mm / 24 hours	Tensile Strength	10 N/mm
Mechanical Strength	48 hours		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Single component.
- Polyurethane based.
- Easy to apply with gun.
- Does not sag.
- Can be painted over.
- Resistant against water and weather conditions.
- Resistant against aging and UV rays.
- Maintains elasticity in varying weather temperatures.

Areas of Use

- Indoor and outdoor spaces
- Horizontal and vertical dilatation joints
- Surfaces of cement based construction materials, brick, ceramic, glass, wood, galvanized sheet, painted sheet
- Filling joints of building elements in construction industry
- Roof tiling
- Filling gaps between wall and joinery in assembly of PVC and wooden door and window joinery
- Joints of prefabricated elements

Surface Preparation

The surfaces should be clean, smooth, even and dry and weaker particles should be removed from the surface.

Avoid application on humid surfaces.

Before application the joints should be thoroughly cleaned with a wire brush, spiral or sandblasting. The joint space should be dusted by blowing air into it.

In order to keep the sealant from spreading around and to make it come out smoothly, a masking tape is used on the upper part of the joint, without the tape reaching the center of the joint. The joint width should not be less than 6 mm. The joint widths should be between 10-30 mm and the depth should be between 6-15 mm. (Approximate ratio: depth/width = 1/2). In order to adjust the aforementioned values, base material (polyethylene fuse etc.) should be used inside the joints.

Mixture Preparation

YAPIFINE GOOP HM is ready for use.

Application Information



The sealant sausage is placed into the sausage gun and is then moved forward by pulling on the trigger. The material is applied without allowing air to get into the joint.

In wide joints, in order to get the sealant to have contact with both the edges and the base, more than one application with the gun might be required.

The surface on a filled joint should be smoothened and evened with the joint spatula and the masking tapes should immediately be removed from the surface without deforming the shape of the joint.



Application Conditions

Ambient temperature: Between +5 °C and +30 °C.

Joint surfaces of application should be dry and free of moisture.

Make sure that the applied sealant adheres to the inner surfaces of the joints but not to the bases.

Varying surfaces and air temperatures may affect service and drying time.

After application, the area should be protected against adverse weather conditions such as direct sunlight, wind, high temperatures (above +50°C), rain and frost.

After application, clean the tools and equipments with an appropriate solvent.

Resistant against water, seawater, diluted alkalis, concrete group and water-based detergents. Not resistant against alcohol, organic acid, concentrated alkali and hydrocarbon fuel.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 600 ml sausage

Consumption

1.20-1.30 g/linear meter

Joint Width (mm)	Joint Depth (mm)	Joint Length (600 ml sausage/m)
10	8	7,5
15	8	5
20	10	3
25	12	2
30	15	1,33

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

During the application smoking should not take place and fires shouldn't be lit.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE GOOP® HYBRID

Hybrid Polymer Based Sealant

Product Description

One component, high performance, hybrid polymer based joint filler and proofing sealant cured with atmospheric moisture.

TECHNICAL PROPERTIES

Appearance	White / Grey	Mechanical Strength	48 hours
Density	1.02 kg/l ± 0.03	Full Strength	7 days
Application Temperature	Between +5°C and +30°C	Hardness (Shore A)	35 ± 5
Service Temperature	-40°C / +90°C	Elongation on Rupture	≥ 300 %
Surface Drying	35 minutes	100% Elongation Module	0.8 Mpa

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Single component.
- Free of solvent and isocyanate.
- No VOC emission.
- Easy to apply.
- Does not sag.
- Can be painted over.
- Resistant against water and weather conditions.
- Resistant against aging and UV rays.
- Maintains elasticity in varying weather temperatures.

Areas of Use

- Indoor and outdoor spaces
- Horizontal and vertical dilatation joints
- Surfaces of cement based construction materials, brick, ceramic, glass, wood, galvanized sheet, painted sheet
- Filling joints of building elements in construction industry
- Roof tiling
- Filling gaps between wall and joinery in assembly of PVC and wooden door and window joinery
- Joints of prefabricated elements

Surface Preparation

The surfaces should be clean, smooth, even and dry and weaker particles should be removed from the surface. Avoid application on humid surfaces. Before application the joints should be thoroughly cleaned with a wire brush, spiral or sandblasting. The joint space should be dusted by blowing air into it. In order to keep the sealant from spreading around and to make it come out smoothly, a masking tape is used on the upper part of the joint, without the tape reaching the center of the joint. The joint width should not be less than 6 mm. The joint widths should be between 10-30 mm and the depth should be between 6-15 mm. (Approximate ratio: depth/width = 1/2). In order to adjust the aforementioned values, base material (polyethylene fuse etc.) should be used inside the joints.

Mixture Preparation

YAPIFINE GOOP HYBRID is ready for use.

Application Information



The sealant cartridge / sausage is placed into the appropriate gun and is then moved forward by pulling on the trigger. The material is applied without allowing air to get into the joint.

In wide joints, in order to get the sealant to have contact with both the edges and the base, more than one application with the gun might be required.

The surface on a filled joint should be smoothened and evened with the joint spatula and the masking tapes should immediately be removed from the surface without deforming the shape of the joint.



Application Conditions

Ambient temperature: Between +5 °C and +30 °C.

Joint surfaces of application should be dry and free of moisture. Make sure that the applied sealant adheres to the inner surfaces of the joints but not to the bases. Varying surfaces and air temperatures may affect service and drying time.

After application, the area should be protected against adverse weather conditions such as direct sunlight, wind, high temperatures (above +50°C), rain and frost. After application, clean the tools and equipments with an appropriate solvent. The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 600 ml sausage and 290 ml cartridge

Consumption

1.20-1.30 g/linear metre

Joint Width (mm)	Joint Depth (mm)	Joint Length (600 ml sausage/m)
10	8	7,5
15	8	5
20	10	3
25	12	2
30	15	1,33

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

During the application smoking should not take place and fires shouldn't be lit.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE GOOP® ULTRA TACK

Hybrid Polymer Based Adhesive Sealant

Product Description

One component, high performance, hybrid polymer based joint filler and proofing sealant cured with atmospheric moisture.

TECHNICAL PROPERTIES

Appearance	White / Grey	Mechanical Strength	48 hours
Density	1.56 kg/l ± 0.03	Full Strength	7 days
Application Temperature	Between +5°C and +30°C	Tensile Strength	≥ 1.90 N/mm ²
Service Temperature	-30°C / +90°C	Hardness (Shore A)	50 ± 5
Initial Curing	5-10 minutes	Elongation on Rupture	> 300 %

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Single component.
- Free of solvent and isocyanate.
- No VOC emission.
- Easy to apply.
- Does not sag.
- Can be painted over.
- Allows heavy objects to adhere to any surface.
- Resistant against water and weather conditions. Can be used in bonding and sealing applications in damp wet areas.
- Resistant against aging and UV rays.
- Maintains elasticity in varying weather temperatures.

Areas of Use

- Indoor and outdoor spaces
- Horizontal and vertical dilatation joints
- Bonding almost all kind of materials such as metal, aluminium, glass, plastic, cornices, wood, concrete, composite panels and kitchen accessories

Surface Preparation

The surfaces should be clean, smooth, even and dry and weaker particles should be removed from the surface.

Avoid application on humid surfaces.

Before application the joints should be thoroughly cleaned with a wire brush, spiral or sandblasting. The joint space should be dusted by blowing air into it.

In order to keep the sealant from spreading around and to make it come out smoothly, a masking tape is used on the upper part of the joint, without the tape reaching the center of the joint. The joint width should not be less than 6 mm. The joint widths should be between 10-30 mm and the depth should be between 6-15 mm. (Approximate ratio: depth/width = 1/2). In order to adjust the aforementioned values, base material (polyethylene fuse etc.) should be used inside the joints.

Mixture Preparation

YAPIFINE GOOP HYBRID is ready for use.

Application Information



The sealant cartridge is placed into the sausage gun and is then moved forward by pulling on the trigger. The material is applied without allowing air to get into the joint.

In wide joints, in order to get the sealant to have contact with both the edges and the base, more than one application with the gun might be required.

The surface on a filled joint should be smoothened and evened with the joint spatula and the masking tapes should immediately be removed from the surface without deforming the shape of the joint.



Application Conditions

Ambient temperature: Between +5 °C and +30 °C.

Joint surfaces of application should be dry and free of moisture. Make sure that the applied sealant adheres to the inner surfaces of the joints but not to the bases.

Varying surfaces and air temperatures may affect service and drying time.

After application, the area should be protected against adverse weather conditions such as direct sunlight, wind, high temperatures (above +50°C), rain and frost.

After application, clean the tools and equipments with an appropriate solvent.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 290 ml cartridge

Consumption

1.20-1.30 g/linear metre

Joint Width (mm)	Joint Depth (mm)	Joint Length (290 ml cartridge/m)
10	8	3.63
15	8	2.42
20	10	1.45
25	12	0.97
30	15	0.64

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

During the application smoking should not take place and fires shouldn't be lit.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE GOOP® PUTTY

Polyurethane Based Thixotropic Joint Putty

Product Description

Two component, self levelling polyurethane based bitumen modified joint filling and waterproofing material that is resistant to jet fuel.

TECHNICAL PROPERTIES

Appearance	Black	Mechanical Strength	48 hours
Pot Life	35 - 45 minutes	Final Strength	7 days
Density	1.37 kg/L $\pm$ 0.03	Tensile Strength	1.50 N/mm ²
Application Temperature	Between +5°C and +40°C	Hardness (Shore A)	20 - 35
Service Temperature	-30°C / +80°C	Elongation	400 - 600 %
Initial Curing	24 hours	Return	98 %

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23 $\pm$ 2°C temperature with relative humidity of %50 $\pm$ 5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Solvent-free.
- Polyurethane-based,
- Easy to apply due to self levelling feature,
- Applicable in vertical applications since it does not sag.
- High resistance against defrosting chemicals.
- Resistant against oils and various chemicals.
- Flexibility maintained under various air temperatures.

Areas of Use

- Together with compatible primer, on surfaces of concrete, floor hardener, asphalt, natural stone, mosaic and sheet metal
- Areas under effects of chemicals
- Airports, seaports and shipyards
- Floors under effect of oil and fuel
- Refineries and filling stations
- Industrial areas, storehouses
- Parking areas
- Grouting and crack repair of asphalt and concrete roads
- Vertical applications

Surface Preparation

The surfaces should be clean, smooth, even and dry and weaker particles should be removed from the surface. Avoid application on humid surfaces.

Before application the joints should be thoroughly cleaned with a wire brush, spiral or sandblasting. The joint space should be dusted by blowing air into it.

In order to keep the sealant from spreading around and to make it come out smoothly, a masking tape is used on the upper part of the joint, without the tape reaching the center of the joint.

The joint width should not be less than 6 mm. The joint widths should be between 10-30 mm and the depth should be between 6-15 mm. (Approximate ratio: depth/width = 1/2). In order to adjust the aforementioned values, base material (polyethylene fuse etc.) should be used inside the joints.

In highly porous weak joints, the joint cheeks should be primed with YAPIFINE BASE EPOXY PRIME.

Mixture Preparation

YAPIFINE GOOP PUTTY is prepared by pouring Component B onto the Component A in its original packaging and stirring with a low speed mixer after which is placed in a sausage gun. According to the joint width the tip of the cannula is adjust. The mixture should be used for application within 35 minutes.



Application Information



The sealant cartridge is placed into the sausage gun and is then moved forward by pulling on the trigger. For the joints where the polyethylene fuse was used starting from the surface the fuse was placed on, the inner left and right surfaces and then the remaining center of the joint are filled. The filled joint surface is then smoothed and evened out with a joint spatula and the masking tapes are also immediately removed without deforming the shape of the joint.

Application Conditions

Ambient temperature: Between +5 °C and +30 °C.

Joint surfaces of application should be dry and free of moisture. Make sure that the applied sealant adheres to the inner surfaces of the joints but not to the bases. Varying surfaces and air temperatures may affect service and drying time.

After application, the area should be protected against adverse weather conditions such as direct sunlight, wind, high temperatures (above +50°C), rain and frost.

After application, clean the tools and equipments with an appropriate solvent. The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ 10 kg set (Component A: 9.2 kg, Component B: 0.80 kg)

Consumption

10 mm x 10 mm joint in 115 g/linear meter

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention. Rinse with plenty of water in case of contact with the skin. During the application smoking should not take place and fires shouldn't be lit. For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE GOOP® PUTTY TX

Polyurethane Based Thixotropic Joint Putty

Product Description

Three component polyurethane based bitumen modified grouting and waterproofing material that is resistant to jet fuels.

TECHNICAL PROPERTIES

Appearance	Black	Mechanical Strength	48 hours
Pot Life	35 – 45 minutes	Final Strength	7 days
Density	1.35 kg/L ± 0.03	Tensile Strength	1.50 N/mm ²
Application Temperature	Between +5°C and +40°C	Hardness (Shore A)	20 – 35
Service Temperature	-30°C / +80°C	Elongation	400 - 600 %
Initial Curing	24 hours	Return	98 %

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Solvent-free.
- Polyurethane-based.
- Applicable in vertical applications since it does not sag.
- High resistance against defrosting chemicals.
- Resistant against oils and various chemicals.
- Flexibility maintained under various air temperatures.

Areas of Use

- Together with compatible primer, on surfaces of concrete, floor hardener, asphalt, natural stone, mosaic and sheet metal
- Areas under effects of chemicals
- Airports, seaports and shipyards
- Floors under effect of oil and fuel
- Refineries and filling stations
- Industrial areas, storehouses
- Parking areas
- Grouting and crack repair of asphalt and concrete roads
- Vertical applications.

Surface Preparation

The surfaces should be clean, smooth, even and dry and weaker particles should be removed from the surface. Avoid application on humid surfaces. Before application the joints should be thoroughly cleaned with a wire brush, spiral or sandblasting. The joint space should be dusted by blowing air into it. In order to keep the sealant from spreading around and to make it come out smoothly, a masking tape is used on the upper part of the joint, without the tape reaching the center of the joint. The joint width should not be less than 6 mm. The joint widths should be between 10-30 mm and the depth should be between 6-15 mm. (Approximate ratio: depth/width = 1/2). In order to adjust the aforementioned values, base material (polyethylene fuse etc.) should be used inside the joints. In highly porous weak joints, the joint cheeks should be primed with YAPIFINE BASE EPOXY PRIME.

Mixture Preparation

YAPIFINE GOOP PUTTY TX is prepared by mixing components A, B and C together and stirring the mixture with a low speed mixer after which is placed in a sausage gun. According to the joint width the tip of the cannula is adjust. The mixture should be used for application within 35 minutes.

Application Information



The sealant cartridge is placed into the sausage gun and is then moved forward by pulling on the trigger. For the joints where the polyethylene fuse was used starting from the surface the fuse was placed on, the inner left and right surfaces and then the remaining center of the joint are filled. The filled joint surface is then smoothed and evened out with a joint spatula and the masking tapes are also immediately removed without deforming the shape of the joint.



Application Conditions

Ambient temperature: Between +5 °C and +30 °C. Joint surfaces of application should be dry and free of moisture. Make sure that the applied sealant adheres to the inner surfaces of the joints but not to the bases. Varying surfaces and air temperatures may affect service and drying time. After application, the area should be protected against adverse weather conditions such as direct sunlight, wind, high temperatures (above +50°C), rain and frost. After application, clean the tools and equipments with an appropriate solvent. The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ 10 kg set

Consumption

10 mm x 10 mm joint in ~115 g/linear meter

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention. Rinse with plenty of water in case of contact with the skin. During the application smoking should not take place and fires shouldn't be lit. For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE GOOP® DILATATION

TPE Dilatation Tape

Product Description

Highly elastic, thermoplastic elastomer based dilatation tape for insulation of dilatation spaces, thermal expansion joints and cracks.

TECHNICAL PROPERTIES

Appearance	Grey	Elongation at Longitudinal Rupture	630 %
Size	Width: 20 cm Thickness: 1 mm	Latitudinal Rupture Elongation	990 %
Service Temperature	-60°C/+80°C	Tearing Strength	≥ 47 N/mm ²
Thermal Source Temperature	250°C	Tensile Strength	≥ 6.6 MPa
Hardness (Shore A)	75	Pressurized Water Strength	8 bar
Bursting Pressure	≥ 4 Bar	Reaction to Fire	B2

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Easy to apply thanks to epoxy adhesive.
- High elasticity.
- Features high levels of adherence.
- Has the ability to bond with itself via heat.
- Resistant against diluted acidic and alkali solutions.
- Resistant against ozone and UV.
- Resistant against plant roots.

Areas of Use

- Any kind of building dilatations
- Horizontal and vertical applications
- Underground sections of foundations and shear concrete
- Water tanks, pools, potable water and wastewater treatment facilities
- Tunnels and culverts
- Insulation of cold joints

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances that would prevent adhesion.

The plaster and weak particles that do not adhere to the surface well enough should be removed from the surface prior to the application.

If there are abnormalities and/or defects on the application surface these should be repaired with YAPIFINE MEND POWER.

Application Information

YAPIFINE MEND EPOXY 2C applied on both sides of the dilation approximately 1-1.5 mm thickness and 40-50 mm width by trowel or spatula.

In order to ensure good adhesion the adhesive should be applied really well onto the surface.

The areas where tape application will be done are determined and the tape sizes are adjusted accordingly.

The dilatation band is placed onto its adhesive side and with the help of a roller, it is made sure that the band makes thorough contact with the epoxy mortar. The mortar is observed to be coming out of the holes on the band.

Likewise, the epoxy mortar is applied on the top side of the band as well. With the help of a spatula the mortar is smoothed and evened out all the while paying attention that the mortar does not cross over into the joint space.

In case there will be additional band applications, the bands are placed such that the overlap length between them is 10 cm. Hot air is blown onto the overlapping parts so that they melt and are melded together.

During this process, it is recommended to use low temperatures just enough to melt the bands and meld them together in order to avoid deforming the bands.

The bands shouldn't be moved or lifted up until the adhesive mortar has thoroughly dried and hardened.



Application Conditions

Application shouldn't be done on surfaces that were exposed to direct sunlight for too long, surfaces that are too hot or surfaces that are frozen.

Optimal ambient temperature is between +5°C and +30°C, if the temperature is not within these limits, then the application shouldn't take place.

The application area should be protected from the wind or direct sunlight during the application process.

Before and after the application, it should be paid attention to that the sharp and piercing tools do not damage the structure of the product.

Packaging

- 20 m roll in cardboard box

Storage and Shelf Life

The shelf life of the product is 24 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE GOOP® PUFF

Sealing Tape

Product Description

New generation, high performance, acrylic polymer based hydrophilic sealing tape that swells upon contact with water.

TECHNICAL PROPERTIES

Appearance	Gri	Wet-Dry Expansion Ratio	250 %
Application Temperature	-20°C / +50°C	Water Pressure Strength	7 Bar
Expansion	7 Days	Hardness (Shore A)	40 ± 5
	14 Days		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Easy to use. Easily applicable on horizontal and vertical areas.
- Upon contact with water, it expands up to 600% and fills possible cracks and pores in cold joints. It makes concrete joints waterproof.
- Swells strongly and rapidly.
- Requires no bonding/welding at joints.
- Applicable in areas with varying water pressure.
- Swells in saltwater as well.
- Returns to its original size when the contact with water ends.

Areas of Use

- Indoor and outdoor spaces
- Wall connections
- Reinforced concrete construction
- As water retainer at piping inlets & outlets
- Foundation and shear wall joints
- Construction joints of cable channels
- Joints of former and new concrete
- Construction joints

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances that would prevent adhesion. Surface may be dry or slightly humid. Not recommended for application on wet surfaces or rainy weather. Highly rough surfaces may lead to water leakage after application. The concrete surface, where the tape is to set, should be as smooth as possible. Plasters that cannot adhere completely to surface and weaker particles should be cleaned of surface prior to application.

Application Information

A portion of the band is cut from the roll, enough for the application surface. The exposed side of the band is adhered to the concrete and in order to achieve greater adhesion it is pressed against the concrete for a time. The joints are placed 10 cm apart from each other and not on top of each other so they don't overlap. After the band adhesion process pour the concrete over the band without damaging it.

Application Conditions

The product should not be removed from its packaging until it is to be used. After application, avoid contact with water until concrete is poured on. Water hardness and salt ratio may affect volume change. Not suitable for use with joints that are likely to move.

Packaging

- 5 mm x 20 mm x 20 m roll
- 10 mm x 20 mm x 10 m roll

Storage and Shelf Life

The shelf life of the product is 24 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes or accidental ingestion of the product seek immediate medical attention. For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE GOOP® PAH

Flexible Waterproofing Tape

YAPIFINE



Product Description

Polypropylene based, flexible waterproofing tape.

TECHNICAL PROPERTIES

Appearance	White	Latitudinal Rupture Elongation	160 %
Size	Width: 20 cm Thickness: 1 mm	Bursting Pressure	3 Bar Positive
Service Temperature	-60°C / +80°C	UV Resistance	Minimum 500 hours
Elongation at Longitudinal Rupture	24 %	Pressurized Water Strength	≥ 1.5 Bar

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Perfectly compatible with spread waterproofing products and ensures joint-free insulation.
- Compatible with cement-based products thanks to alkali resistance.

Areas of Use

- Horizontal and vertical joints
- Underneath the indoors tiles and ceramics
- Water tank, swimming pool and parapet joints
- Foundation-shear wall joints
- Piping inlets, filter details
- Filling rod holes
- As a system together with YAPIFINE HYDRA waterproofing products

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances that would prevent adhesion. Plasters that are not completely adhered to surface and weak particles should be cleaned prior to application. Any defect on projected application surface should be repaired with YAPIFINE MEND POWER.

Application Information

Waterproofing material is applied on the joints and cracks and before it dries YAPIFINE GOOP PAH is laid on top of it. To make sure it thoroughly connects with the waterproofing layer it is pressed against the layer with the help of a roller or a brush. It should be paid attention to that there are no bumps on the tape. The second layer is applied only after the waterproofing material has dried off, meaning that the tape will be left in between the layer applications. The tape should not be moved or lifted up until the waterproofing mortar has completely hardened.

Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen. Should not be applied when the ambient temperature is not within the values of +5°C and +30°C. The application area should be protected from the effects of wind and direct sunlight. It should be paid attention to that the sharp and piercing objects do not damage the structure of the product before the application.

Packaging

- 50 m roll in cardboard box

Storage and Shelf Life

The shelf life of the product is 24 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes or accidental ingestion of the product seek immediate medical attention.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE



REPAIR & REINFORCEMENT

- Cement Based Products
- Epoxy Based Products
- Primers

“High performance products that are specially developed for surface preparation, repair and reinforcement of concrete.”

APPLICATION AREAS	PAGE NO	182	184	186	188	190	192	194	196	197
	PRODUCTS	YAPIFINE MEND 10	YAPIFINE MEND 20	YAPIFINE MEND POWER	YAPIFINE SECURE	YAPIFINE SECURE FAST	YAPIFINE MEND EPOXY 2C	YAPIFINE SECURE EPOXY 3C	YAPIFINE UNI PRIME	YAPIFINE BC PRIME
Column, shear wall repairs				■	■	■	■	■		
Repair and filling of cracks up to 1-5 mm		■								
Repair and filling of cracks up to 10-40 mm			■	■			■			
Floor and plaque repair					■	■	■	■		
Smooth and stable surface preparation prior to ceramic coating, painting and insulation			■	■	■					
Manhole covers and precast channel installation					■	■				
Repair of airport and port runways					■	■	■	■		
Repair of harbor, pier and water structures							■	■		
Subway, dam and highway construction					■	■	■	■		
Exposed concrete surface correction and plaster repairs		■	■							
For filling core, tie, tie-rod holes			■	■		■	■			
Chamfer and segregation application			■	■						
Industrial machinery, steel column etc. fixing to the floor					■	■	■	■		
Machine floors exposed to high mechanical loads								■		
Early high strength applications						■				
Bolt and anchor fittings						■	■			
Bonding of metal parts to concrete							■			
Bonding of dilatation tape							■			
Resistance to chemicals							■	■		
Primer for exposed concrete surface										■
Concrete, aerated concrete, plasterboard, etc. surfaces to create a dust-free surface									■	

Product Description

Cement based, polymer modified, single component, surface repair and fixing mortar with improved adherence and fine aggregate.

TECHNICAL PROPERTIES

Appearance	Grey powder	Elastic Modulus	> 25 Gpa
Pot Life	min. 45 minutes	Capillary Water Absorption	≤ 0.5 kg/(m ² .h0.5)
Application Temperature	Between +5°C and +30°C	Compressive Strength (28 days)	≥ 25 N/mm ²
Service Temperature	-30°C /+80°C	Flexural Strength (28 days)	≥ 7 N/mm ²
Application Thickness	max. 30 mm per layer	Adhesive Strength (28 days)	≥ 1 N/mm ²
Time Before Use	1 day	Reaction to Fire	A 1
Restrained Shrinkage / Expansion	≥ 0.8 N/mm ²		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Easy to apply.
- Suitable for spraying and use with trowel.
- Noncorrosive and nontoxic.
- Does not cause cracks and dusting.
- Resistant to freeze-thaw cycle.

Areas of Use

- Cement based, polymer modified, single component, surface repair and fixing mortar with improved adherence and fine aggregate.Used for obtaining smoother surface in fine repairs
- Repair of concrete after moulding during any kind of construction
- Repair of non-structural areas, repair of mineral surfaces
- Correction and repair of wall and ceiling plasters
- Repair and forming of gas concrete, exposed concrete, prefabricated concrete, briquette, brick etc. surfaces
- Filling concrete voids and repair of cracks
- In order to obtain a smooth subsurface before the applications of ceramics and tiles
- Filling air bubbles and pockets

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances that would prevent adhesion.

The plaster and weak particles that do not adhere to the surface well enough should be removed from the surface prior to the application.

Highly absorbant surfaces should be saturated with water before the application. It should be paid attention to that there are no water puddles on the surface as well.

Mixture Preparation

25 kg of YAPIFINE MEND 10 is slowly poured into 4-5 liters of clean water. Preferably with a low speed mixer, it is mixed with water for a minimum of 1-2 minutes up until when a homogeneous mixture is obtained.

The prepared mortar is left to develop for 3 minutes after which is then lastly stirred for another 2 minutes.

The fresh mortar should be used within 30 minutes.



Application Information



Applied to the surface in the appropriate width with the help of a trowel.

In order to ensure the surface smoothness, an application of trifolium is done. After the application the surface needs to be kept damp for the next 24 hours.

Applications should be done layer by layer where the application thickness is larger than 30 mm and between each layer a minimum of 3 hours should be waited.

Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen. Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

The application area should be protected from the effects of wind and direct sunlight.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ 25 kg kraft bag

Consumption

Powder consumption of $1.90 \pm 0.2 \text{ kg/m}^2$ for 1 mm thickness

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes or accidental ingestion of the product seek immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

Since it's cement based, do not breathe.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

Product Description

Cement based, fibre reinforced, single component, waterproof, structural repair and finishing mortar with coarse aggregate and chemical additives for higher product performance and workability.

TECHNICAL PROPERTIES

Appearance	Grey powder	Elastic Modulus	> 20 Gpa
Pot Life	min. 45 minutes	Capillary Water Absorption	≤ 0.5 kg/(m ² .h ^{0.5})
Application Temperature	Between +5°C and +30°C	Compressive Strength (28 days)	≥ 45 N/mm ²
Service Temperature	-30°C /+80°C	Flexural Strength (28 days)	≥ 5 N/mm ²
Application Thickness	max. 40 mm per layer	Adhesive Strength (28 days)	≥ 2 N/mm ²
Time Before Use	1 day	Chloride Ion Content	≤ 0.05 %
Restrained Shrinkage / Expansion	≥ 2 N/mm ²	Reaction to Fire	A1

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Easy to apply.
- Suitable for upside down applications.
- Not affected by humidity due to not having any metal content.
- Waterproof.
- Resistant to sulphate and chlorine.
- Does not cause corrosion.
- Resistant to carbonation.
- Can be used in contact with reinforcement due to chloride-free content.
- Does not shrink.
- Ensures high compressive strength.
- Does not cause cracking and dusting.
- Resistant to freeze-thaw cycle.

Areas of Use

- Structural repairs,
- Repair of surfaces of gas concrete, exposed concrete, prefabricated concrete, briquette, brick etc.
- Floorings for special coverings with light or medium traffic load and surface repairs
- Any kind of industrial, reinforced concrete building
- Filling tension gaps (rod clearances/tie-rod holes) and core spaces in concrete buildings
- Repairing concrete that is obtained via moulding during any kind of construction work and repairment of cracks
- Repair, restoring and reinforcing projects
- Repairing surface disorders of 10-40 mm thick at once

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances that would prevent adhesion. The plaster and weak particles that do not adhere to the surface well enough should be removed from the surface prior to the application. Highly absorbant surfaces should be saturated with water before the application. It should be paid attention to that there are no water puddles on the surface as well.

Mixture Preparation

25 kg of YAPIFINE MEND 20 is slowly poured into 3,5 - 4,5 litres of clean water. Mix with a – preferably – low-speed mixer for minimum 5 minutes until homogeneous mixture is obtained. The prepared mortar is left to develop for 3 minutes after which is then lastly stirred for another 2 minutes. The fresh mortar should be used within 30 minutes.

Application Information



Applied to the surface in the appropriate width with the help of a trowel.

After the application the surface needs to be kept damp for the next 24 hours.

Applications should be done layer by layer where the application thickness is larger than 40 mm and between each layer a minimum of 3 hours should be waited.



Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen. Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

The application area should be protected from the effects of wind and direct sunlight. The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 25 kg kraft bag

Consumption

Powder consumption of $1.90 \pm 0.2 \text{ kg/m}^2$ for 1 mm thickness

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes or accidental ingestion of the product seek immediate medical attention. Rinse with plenty of water in case of contact with the skin. Since it's cement based, do not breathe. For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE MEND® POWER

Coarse Structural Repair Mortar – R4

Product Description

Cement based, single component, waterproof, non-shrinking structural repair mortar with coarse aggregate and fibre reinforcement including performance and workability boosting chemical additives.

TECHNICAL PROPERTIES

Appearance	Grey powder	Elastic Modulus	> 20 Gpa
Pot Life	min. 20 minutes	Capillary Water Absorption	≤ 0,5 kg/(m².h0,5)
Application Temperature	Between +5°C and +30°C	Compressive Strength (28 days)	≥ 60 N/mm²
Service Temperature	-30°C / +80°C	Flexural Strength (28 days)	≥ 10 N/mm²
Application Thickness	max. 40 mm per layer	Adhesive Strength (28 days)	≥ 2 N/mm²
Time Before Use	1 day	Chloride Ion Content	≤ 0,05 %
Restrained Shrinkage / Expansion	≥ 2 N/mm²	Reaction to Fire	A1

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Easy to apply.
- Suitable for vertical and horizontal applications.
- Not affected by humidity due to not having any metal content.
- Waterproof.
- Resistant to sulphate and chlorine.
- Does not cause corrosion.
- Resistant to carbonation.
- Can be used in contact with reinforcement due to chloride-free content.
- Does not shrink.
- Ensures high compressive strength.
- Does not cause cracking and dusting.
- Resistant to freeze-thaw cycle.

Areas of Use

- Any kind of industrial, reinforced concrete building
- Floorings on special coverings and surface repairs for areas with light or medium traffic load
- Filling tension gaps (rod clearances/tie-rod holes) and core spaces in concrete buildings
- Repairing concrete that is obtained via moulding during any kind of construction work and repairment of cracks
- Engineering constructions such as subway, motorway, dam etc.
- Repairment, restoration and reinforcement projects
- Repairing surface disorders of 10–40 mm thick at once

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances that would prevent adhesion.

The plaster and weak particles that do not adhere to the surface well enough should be removed from the surface prior to the application.

Highly absorbant surfaces should be saturated with water before the application. It should be paid attention to that there are no water puddles on the surface as well.

Mixture Preparation

25 kg of YAPIFINE MEND POWER is slowly poured into 3.5-4.5 liters of clean water. Preferably with a low speed mixer, it is mixed with the water for a minimum of 5 minutes up until when a homogeneous mixture is obtained.

The prepared mortar is left to develop for 3 minutes after which is then lastly stirred for another 2 minutes.

The fresh mortar should be used within 20 minutes.



Application Information



Applied to the surface in the appropriate width with the help of a trowel. After the application the surface needs to be kept damp for the next 24 hours. Applications should be done layer by layer where the application thickness is larger than 40 mm and between each layer a minimum of 3 hours should be waited. After the application, the surface should be kept damp for 2-3 more days.

Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen. Should not be used in contact with liquids which have a pH level lower than 5.5.

In large surfaces, the last layer should not be used as a concrete tiling coating.

Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

The application area should be protected from the effects of wind and direct sunlight.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ 25 kg kraft bag

Consumption

Powder consumption of $1.80 \pm 0.2 \text{ kg/m}^2$ for 1 mm thickness.

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes or accidental ingestion of the product seek immediate medical attention. Rinse with plenty of water in case of contact with the skin. Since it's cement based, do not breathe. For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE SECURE®

Non-Shrink Grout Mortar – R4

Product Description

Cement based, single component, non-shrinking, fluid grout mortar with high adherence and strength.

TECHNICAL PROPERTIES

Appearance	Grey powder	Elastic Modulus	> 20 Gpa
Pot Life	min. 30 minutes	Capillary Water Absorption	≤ 0.5 kg/(m ² .h ^{0.5})
Application Temperature	Between +5°C and +30°C	Compressive Strength (28 days)	≥ 60 N/mm ²
Service Temperature	-30°C /+80°C	Flexural Strength (28 days)	≥ 9 N/mm ²
Application Thickness	max. 75 mm per layer	Adhesive Strength (28 days)	≥ 2 N/mm ²
Time Before Use	1 day	Chloride Ion Content	≤ 0.05 %
Restrained Shrinkage / Expansion	≥ 2 N/mm ²	Reaction to Fire	A1

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Easy to apply.
- Thanks to fluid structure, settles automatically and easily penetrates into void and cracks.
- Available for pumping or pouring.
- High compressive strength.
- Perfect adherence to concrete, iron and steel.
- Offers early compressive strength.
- Resistant to freeze-thaw cycle.
- Can be used in contact with reinforcement due to chloride-free content.
- Application thickness of 10 – 75 mm.

Areas of Use

- Both indoors and outdoors
- Assembly of prefabricated concrete construction elements
- Engineering constructions such as subway, highway, dam etc.
- As fluid filling in hard-to-reach places
- Fixing steel columns and poles
- Fixing any kind of industrial machinery
- Filling concrete cracks and grooves
- Production of partitions and column heads

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances that would prevent adhesion.

The plaster and weak particles that do not adhere to the surface well enough should be removed from the surface prior to the application. The surface should be cleaned and prepared by means of appropriate mechanical surface preparation techniques such as high-pressure water jet, roughening, sandblasting etc. For applications with mould, make sure the moulds are clean and impermeable, before fixing them as required. If there is water leakage in application area, the leakage should be drained by means of appropriate stopper. Highly absorbant surfaces should be saturated with water before the application. It should be paid attention to that there are no water puddles on the surface as well.

Mixture Preparation

Pour 25 kg product slowly on 3-4 litres of clean water. The water should have a temperature of 20-25°C. Preferably with a low speed mixer, it is mixed with the water for a minimum of 3 minutes up until when a homogeneous mixture is obtained. The prepared mortar is left to develop for 2 minutes after which is then lastly stirred for another 30 seconds.

Application Information

The prepared mortar should be poured into the molds without delay, just enough to create a thickness of between 10 mm and 75 mm. In order to prevent air from getting trapped inside, the mortar should be poured into the mold from one side and without interruption. During the application there should not be any air bubbles inside the product. Since the air bubbles would inhibit the surface adhesion of the product they would reduce the adhesion strength. In such cases, the placement of the mortar should be done with a steel stick. Resting time between layers is 3 hours. Second layer is applied only after the first layer is finished drying/setting. The prepared mortar should be used within 20-25 minutes.



Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen. Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

The application area should be protected from the effects of wind and direct sunlight. After application, carry out curing on surface with YAPIFINE CURE ACR in order to prevent premature drying. Do not use for patch repair. The mortar should not be subject to vibration until it sets. Moulds can be removed after 24 hours. In machinery assemblies, machines should not be run until the mortar is set. The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ 25 kg kraft bag

Consumption

~2,0 kg of powder for 1 m³ grout mortar.

Storage and Shelf Life

The shelf life of the product is 1 year (12 months) when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes or accidental ingestion of the product seek immediate medical attention. Rinse with plenty of water in case of contact with the skin. Since it's cement based, do not breathe. For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE SECURE® FAST

Rapid Setting Non-Shrink Grout Mortar

Product Description

Cement based, single component, rapid setting, non-shrinking, fluid grout mortar with high adherence and strength.

TECHNICAL PROPERTIES

Appearance	Grey powder	Capillary Water Absorption	$\leq 0,5 \text{ kg}/(\text{m}^2 \cdot \text{h}^{0,5})$
Pot Life	max. 2.5 minutes	1 hour	$\geq 16 \text{ N/mm}^2$
Application Temperature	Between +5°C and +30°C	24 hours	$\geq 35 \text{ N/mm}^2$
Service Temperature	-30°C / +80°C	28 days	$\geq 65 \text{ N/mm}^2$
Application Thickness	max. 40 mm per layer	Flexural Strength (28 days)	$\geq 7 \text{ N/mm}^2$
Setting Time	~ 5 minutes	Adhesive Strength (28 days)	$\geq 2 \text{ N/mm}^2$
Time Before Use	1 day	Chloride Ion Content	$\leq \% 0,05$
Restrained Shrinkage / Expansion	$\geq 2 \text{ N/mm}^2$	Reaction to Fire	A1
Elastic Modulus	> 20 Gpa		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Easy to apply.
- Thanks to fluid structure, settles automatically and easily penetrates into void and cracks.
- High compressive strength.
- Perfect adherence to concrete, iron and steel.
- Gains strength very fast.
- Not affected by humidity due to metal-free content.
- Resistant to freeze and thaw.
- Can bear normal traffic load within 1 hour after application.

Areas of Use

- Elevation, repair and assembly of manhole covers
- Assembly of kerbs and paving stones
- Applications requiring high strength and short time for operation
- Assembly of prefabricated concrete construction elements
- Repair of concrete subject to traffic
- Fixing materials such as traffic signs, billboards and lighting poles
- Fixing any kind of industrial machinery
- Any kind of anchorage, assembly and concrete repair

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances that would prevent adhesion.

The plaster and weak particles that do not adhere to the surface well enough should be removed from the surface prior to the application.

For applications with mould, make sure the moulds are clean and impermeable, before fixing them as required.

If there is water leakage in application area, the leakage should be drained by means of appropriate stopper.

Highly absorptive surfaces should be waterlogged prior to application. Make sure there is no puddle on surface.

Mixture Preparation

Pour 25 kg product slowly on 3-4 litres of clean water. The water should have a temperature of 20-25°C. Preferably with a low speed mixer, it is mixed with the water until a homogeneous mixture is obtained.

According to the ambient conditions, it might take 5 to 10 minutes for the mixture to set.



Application Information

The prepared mortar should be poured into the molds without delay, just enough to create a thickness of between 10 mm and 40 mm. In order to prevent air from getting trapped inside, the mortar should be poured into the mold from one side and without interruption.

During the application there should not be any air bubbles inside the product. Since the air bubbles would inhibit the surface adhesion of the product they would reduce the adhesion strength. In such cases, the placement of the mortar should be done with a steel stick.

Resting time between layers is 3 hours. Second layer is applied only after the first layer is finished drying/setting.

The prepared mortar should be used within 2.5 minutes.

Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen.

Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

The application area should be protected from the effects of wind and direct sunlight.

The mortar should not be subject to vibration until it sets.

Moulds can be removed after 1-2 hours.

Wait the mortar to harden completely before the assembled machines are started and application areas are opened to traffic.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ 25 kg kraft bag

Consumption

About 21 kg/m² for 10 mm thickness

Storage and Shelf Life

The shelf life of the product is 6 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes or accidental ingestion of the product seek immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

Since it's cement based, do not breathe.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS)

YAPIFINE MEND® EPOXY 2C

Epoxy Based Anchoring and Montage Repair Mortar

Product Description

Epoxy-resin based, two compenant anchorage and montage repair mortar.

TECHNICAL PROPERTIES

Colour	Grey	Time Required for Attaining Full Strength	7 days
Mixture Ratio	3 / 1 (Component A / Component B)	Flexural Strength	≥ 20 N/mm ²
Mixture Density	1.80 kg/L ± 0.05	Compressive Strength	≥ 75 N/mm ²
Mixed Product Time Before Use (+20°C)	40 minutes	Adhesive Strength to Concrete	≥ 2 N/mm ²
Service Temperature	Between -15 °C and +90 °C	Adhesive Strength to Metal	≥ 2 N/mm ²
Application Thickness	min. 2 mm, max. 30 mm	Restrained Shrinkage / Expansion	≥ 2 N/mm ²
Glass Transition Temperature	≥ 45 °C	Elastic Modulus	> 25 Gpa
Chloride Ion Content	≤ 0.05 %	Reaction to Fire	Ds2d0

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Solvent-free.
- Easy to apply.
- High mechanical strength.
- Watertight.
- Can adhere even on humid surfaces.
- Perfect adhesion on concrete and steel.

Areas of Use

- Planting any kind of ironstone, installation of anchorage elements
- Crack repair and isolation of concrete, crack injection and crack isolation
- Sticking dilatation tapes (EPDM, PVC, TPO, TPE)
- Repairing any kind of structural concrete
- Assembly and adhering of any kind of metal component on concrete or steel component

Surface Preparation

Cement based surfaces (concrete, screed, plaster etc.) should be sound, clean, dust-free, and free from molding oils, curing material, bitumen and other foreign substances. Such materials as mortar and cement residues should be peeled off.

The surface to be repaired should be primed with YAPIFINE BASE EPOXY PRIME or YAPIFINE BASE EPOXY PRIME H for humid places. The repair mortar application should be done while the primer is still sticky.

Clean rust and dirt on metal surfaces.

In case of any water leakage, drain and stop it to ensure dry surface.

Mixture Preparation

Until both of the components form a homogeneous mixture with each other, they should be stirred for a minimum of 3 minutes with a mixer-headed drill at around 400-600 rpm.

It should be made sure that the temperature of the mixture is between +15 and +25°C during the mixing process.

Application Information



For Repair Usage; It should be applied by trowel or spatula when the primer is wet on the substrate.

For anchoring reinforcement bars; The hole should be 6 mm larger than the reinforcement to be installed.

The material mixed homogeneously should be poured into the holes which was prepared with necessary diameter and depth. 2/3rd of the depth should be filled.

The reinforcement to be applied should be placed in the hole carefully by rotating slowly. You should observe whether the material over flows.

All tools used should be cleaned up with thinner after the application. Once hardened, mechanical methods are required to free the surface from residual product.



Application Conditions

Blend the product with appropriate mixing drill. Never mix by hand or trowel.

The pot life changes according to the air ambient temperature. Especially at hot temperatures the amount which will be applied should be adjusted accordingly. The ideal temperature range is +10°C to +20°C.

Never add materials such as water or solvent in the mixture. The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ Can set of 5 kg

(Component A: 3,75 kg + Component B: 1,25 kg)

Consumption

1,7 kg/m² for about 1 mm mortar thickness.

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The application area should be well-ventilated.

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes or accidental ingestion of the product seek immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE SECURE® EPOXY 3C

Epoxy Based Grout Mortar

Product Description

Epoxy based, three component, self levelling grout mortar with special gradation quartz aggregate.

TECHNICAL PROPERTIES

Colour	Grey	Compressive Strength	1 day	> 20 N/mm ²
Mixture Ratio	2 / 1 / 12 (Component A / Component B / Component C)		7 days	> 30 N/mm ²
Mixed Product Time Before Use (+20°C)	30 minutes		28 days	> 75 N/mm ²
Service Temperature	Between -15 °C and +90 °C	Adhesive Strength to Concrete		≥ 2 N/mm ²
Application Thickness	min. 4 mm, max. 50 mm	Adhesive Strength to Metal		≥ 3 N/mm ²
Chloride Ion Content	≤ 0.05 %	Restrained Shrinkage / Expansion		≥ 2 N/mm ²
Time Required for Attaining Full Strength	7 days	Elastic Modulus		> 25 Gpa
		Reaction to Fire		Ds2d0

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Applied without primer. Perfect adherence to various surfaces such as concrete and steel.
- Non-shrinking.
- High chemical strength.
- High compressive, flexural and tensile strength.
- High abrasive and impact resistance.
- Does not shrink.
- Solvent-free.

Areas of Use

- Indoor and outdoor spaces
- Assembly of heavy duty machinery
- Machinery foundations to be subject to high dynamic loads
- Repairs requiring high strength on beams and pedestals of portals and tower cranes
- Bridge seats
- Fixing of steel columns on foundation
- Repair and protection of underground engineering structures
- Repair of wide cracks on reinforced concrete floorings

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances that would prevent adhesion. Such materials as mortar and cement residues should be removed. Cracked surfaces should be steepened as much as possible. Reinforcement is required and it must be rust free. If necessary, add new reinforcement.

Preparation of Machine and Its Foundation

Before placing the machine, loose and distorted areas in the concrete should be cleaned and the surfaces to be placed in the grout should be roughened.

The surface must be dry and the bolt and the base surface must be free from foreign substances that will affect the adherence performance of all types of dirt, rust, oil, dust.

Air discharge holes must be drilled in the base plate. After the machine is placed and its position and scale are adjusted, its position should never be changed.

If the adjusting wedges are to be removed later, they should be lightly lubricated to prevent the mortar from sticking.

Preparation of Moulds

The molds must be made of solid material and mounted to withstand the forces they will encounter during the process.

On the side where the grout mortar will be poured, a 5 cm casting space must be left between the edge of the baseplate and the mold. To cause the grout to spread to the grout mortar, the mold height should be considered on the casting side.

To fill the bottom of very large plates, adjust the pressure to spread height up to 1.5 m or use a pump.

It may be necessary to take precautions using such equipment.

The edges of the molds should be without gaps to prevent leakage and pressure loss.



Mixture Preparation

Pour component B into component A. Mix with a low speed electric stirrer (400-600 rpm) until the mixture reaches a completely homogeneous appearance.

Then pour the mixture into a suitable container and slowly and continuously add component C, continue mixing for at least 3 minutes until a homogeneous and smooth mortar is obtained.

Mixture should be aged 2 minutes before pouring for micro air deflation.

Application Information



Repair Applications

Prepared mixture should be applied on the surface with a trowel as 4-50 mm. The maximum application thickness should not exceed 50 mm at a time. Wide surfaces open to the atmosphere, especially hot, dry and windy environments should be protected from external effects for 24- 48 hours.

Grout Applications

If there are other machines to work around the machine to be filled, it should be determined to what extent the vibrations from the environment are transmitted by observing the vibration on the surface of a container of water placed on the baseplate. If necessary, working machines should not be operated for at least 10-12 hours until the grout mortar cures. The prepared grout mortar should be poured on the surface uninterruptedly from one side of the mold, with a thickness of 4-50 mm in one layer. Two-sided casting should be avoided in order to prevent air compression in the mold. To ensure that all the cavities in the mold are filled, placement should be made using a steel wire with a hook, and vibrator should not be used. Wide surfaces open to the atmosphere, especially hot, dry and windy environments should be protected from external effects for 24-48 hours. If the exposed edges are to be broken, it can be broken after connecting the socket and the mortar mold is hard enough to be removed. Setting wedges should not be taken before 2 days. After the machine is put into operation, the looseness of nuts and bolts should be checked and tightened if necessary.

Application Conditions

Blend the product with appropriate mixing drill. Never mix by hand or trowel.

Service and hardening times of epoxy resin-based products depend on ambient and ground temperature. The ideal temperature range is +10°C to +20°C.

Product should be prepared using its components in the given amounts and should not be diluted using solvent or any other extra material. Also, do not add extra aggregate or filler.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ Tin set of 15 kg (A:12 +B:2+ C:1)

Consumption

1 mm thickness approximately corresponds to 2 kg/m².

Storage and Shelf Life

The shelf life of the product is 18 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

For long-term storage cases, the palettes shouldn't be stacked on top of each other.

Opened packages should be stored with sealed up and they should be consumed within a week.

Safety Precautions

The application area should be well-ventilated.

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes or accidental ingestion of the product seek immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

Since it is cement based, do not breathe the powder.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE UNI PRIME

Universal Primer

Product Description

Acrylic copolymer based, ready-to-use primer with high adherence for absorptive surfaces.

TECHNICAL PROPERTIES

Appearance	White liquid	Application Temperature	Between +5°C and +30°C
Density	1.55 kg/L ± 0.03	Drying Time	6 - 24 hours
pH	7 - 9	Service Temperature	-20°C / +70°C

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Economic.
- Increases adherence.
- Balances water loss.
- Resistant against humidity.
- Prevents cracks due to rapid water loss on cement based coatings of absorptive surfaces.
- Increases service time.
- Odourless.
- Safely applicable indoors thanks to water based structure.

Areas of Use

- Indoor and outdoor spaces
- Horizontal and vertical applications
- As adherence-increasing and waterproofing primer before waterproofing and painting applications on dusting and highly absorptive surfaces such as porous concrete, lime stuff, lime fibre or cement based plates and gypsum based surfaces

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances that would prevent adhesion.

The plaster and weak particles that do not adhere to the surface well enough should be removed from the surface prior to the application. Deformed surfaces should be fixed with YAPIFINE MEND repair mortar.

Application Information



Shake well before use. Once ready, the primer is applied on surface by roll, brush or spraying machine. Wait for 6 hours before proceeding to waterproofing or painting.

Application Conditions

Ambient temperature: between +5 °C and +30 °C. Avoid application under strong wind or direct sunlight.

Avoid application in areas with frost risk within 24 hours or directly exposed to sunlight or wind. Make sure the surface of application is not exposed to precipitation until it is set.

Do not add any material which is not mentioned in the instructions.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 10 kg, 20 kg and 30 kg plastic bucket.

Consumption

150 - 200 g/m²

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes or accidental ingestion of the product seek immediate medical attention. Rinse with plenty of water in case of contact with the skin. For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE BC PRIME

Exposed Concrete Primer



YAPIFINE



Product Description

Acrylic emulsion based, filled exposed concrete primer.

TECHNICAL PROPERTIES

Appearance	Green	Drying Period	1 - 3 hours
Density (undiluted)	1.55 kg/l $\pm$ 0.03	Curing Period	~24 hours
Water Dilution Ratio	4 - 6 l water/12 kg product	Service Temperature	-20°C / +70°C
Application Temperature	Between +5°C to +30°C		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23 $\pm$ 2°C temperature with relative humidity of %50 $\pm$ 5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Increases adherence before cement and particularly gypsum plaster applications.
- Makes up for dehydration.
- Odourless.
- Easily applicable indoors due to water based structure.

Areas of Use

- Indoor and outdoor spaces
- Horizontal and vertical applications
- Before cement or plaster based applications on raw concrete surfaces
- Before ceiling plaster
- As adherence-improving primer before applications on former surfaces

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances that would prevent adhesion. The surface cracks, which are deeper than 1 cm, should be repaired with YAPIFINE MEND 10, 6-8 hours in advance. In the cases, where structural repair mortar should be used; YAPIFINE MEND 20 or YAPIFINE MEND POWER should be preferred.

Mixture Preparation

Add 4-6 litres of clean water to dilute product in its own package. Blend with a preferably low-speed mixer until homogeneous mixture is attained.

Application Information



The prepared product is applied as one coat on the surface with textured roller. Product dries within 60-90 minutes after application on surface. Wait for minimum 24 hours before starting cement or gypsum-based plastering. Start plastering within maximum 3 days after lining.

Application Conditions

Ambient temperature: Between +5 °C and +30 °C. Avoid application under strong wind or direct sunlight. Avoid application in areas with risk of freeze in 24 hours, as well as those directly exposed to sunlight and wind. Do not add any material which is not mentioned in the instructions for the application. The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 12 - 24 kg Plastic bucket

Consumption

0,150 - 0,250 kg/m²

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes or accidental ingestion of the product seek immediate medical attention. Rinse with plenty of water in case of contact with the skin. For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE



FLOORING SYSTEMS

- Cement Based Surface Hardeners
- Cement Based Screeds
- Epoxy Based Floor Coating Products
- Polyurethane Based Floor Coating Products
- Cure Materials

“High performance flooring systems that provide special solutions for a variety of application and surface conditions.”

APPLICATION AREAS	PAGE NO	200	202	204	206	208	210	212	214	216	218	220	222
	PRODUCTS	YAPIFINE BASE QUARTZ	YAPIFINE BASE CORUNDUM	YAPIFINE BASE MIX	YAPIFINE BASE SL	YAPIFINE BASE SL PRIME	YAPIFINE BASE EPOXY POWER	YAPIFINE BASE EPOXY GARAGE	YAPIFINE BASE EPOXY PRIME	YAPIFINE BASE EPOXY PRIME H	YAPIFINE BASE PU	YAPIFINE BASE PU ALF	YAPIFINE CURE ACR
For abrasion resistance		■	■	■									
Leveling of surface defects					■								
PVC, hardwood, wood etc. soil preparation before application					■								
Underfloor heating systems					■								
For high abrasion resistance											■		
For chemical and mechanical resistance											■	■	
School, hospital floors							■				■		
Industrial floors							■				■	■	
Uncovered terrace and balconies							■				■		
Heavy vehicle and pedestrian traffic							■	■			■		
Parking, garage floors								■					
To increase the resistance to dust						■							■
Primers									■				
Primer for damp surface						■				■			



YAPIFINE BASE® QUARTZ

Surface Hardener with Quartz Aggregate

Product Description

Cement based, quartz aggregate surface hardener and performance additives, applied in monolithic manner on fresh concrete surfaces. Enhances abrasion resistance of concrete surfaces on grounds subject to light and medium loads.

TECHNICAL PROPERTIES

Appearance	Grey / Red / Green powder	Abrasion Resistance by Taber Abraser	≤ 3 g (H22, 1000 g, 1000 cycles)
Application Temperature	Between +5°C and +30°C	Step Over Time	24 hours
Flexural Strength	≥ 9 N/mm ²	Reaction to Fire	A1
Compressive Strength	≥ 70 N/mm ²		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Ensures non-dusting, bright, smooth surface floors.
- Easy to clean.
- Improves concrete impermeability.
- Enhances abrasion and impact resistance of surface.
- Creates a surface resistant to freeze-thaw cycle.
- Ensures saving of time thanks to ease and rapid application.
- Economic.
- Three different colour options.

Areas of Use

- Indoor and outdoor spaces
- Factories
- Work centres
- Walkways and sidewalks
- Hangars, warehouses and mechanic workshops
- Garages and parking lots, and similar places with intense surface abrasion

Surface Preparation

The load bearing concrete of the application surface should be minimum class C25.

Surface of the fresh concrete where the application is planned should be finished with finishing tray and leveled with wooden trowel.

Consistency of concrete is vital for sound application. If applied on overly consistent concrete, the floor hardener will not react since it cannot incorporate sufficient amount of water, whereupon the hardening does not take place. If the concrete is too slurry, then the hardener is caught up in concrete and remains ineffective.

Wait until the bearing concrete becomes walkable. The ideal time is when 0.5-1.5 cm deep footprints left when stepped on the concrete.

Application Information

Roughly 2/3 of YAPIFINE BASE QUARTZ should be spread on the surface. The material should not be left in clusters, distributed as homogenous as possible.

Also, avoid spreading to long distances not to decompose the aggregates in the product. This process can be done manually or by special spreading equipment.

Wait scattered material to change colour by absorbing the water of the concrete.

The material should be rubbed into the surface with low cycle rotary float (mechanical trowel) and be ensured to integrate with the concrete.

The same process is repeated for the remaining material.

Once the surface is hard enough to the extent that walking on it becomes possible, the final finishing should be performed by high cycle finishing. Switch to knife finishing and continue this process until the desired glossiness is achieved.



Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen.

Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

The application area should be protected from the effects of wind and direct sunlight.

After the surface hardening application is complete, apply YAPIFINE CURE ACR, surface curing agent, in order to prevent the formation of contraction cracks and dusting.

Water and cement content of the concrete may cause slight colour variances.

Avoid contact with water on application surface.

Efflorescence may occur at relative humidity conditions lower than 40%.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 25 kg kraft bag

Consumption

4 – 8 kg/m² depending on intended use and traffic load

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes or accidental ingestion of the product seek immediate medical attention. Rinse with plenty of water in case of contact with the skin.

Since it is cement based, do not breathe its powder.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE BASE® CORUNDUM

Surface Hardener with Corundum Aggregate

Product Description

Cement based, floor corundum aggregate surface hardener and performance booster additives, applied in monolithic manner on fresh concrete surfaces. Enhances abrasion resistance of concrete surfaces on industrial grounds subject to heavy loads and intense vehicular traffic.

TECHNICAL PROPERTIES

Appearance	Grey / Red / Green powder	Abrasion Resistance by Taber Abraser	≤ 3 g (H22, 1000 g, 1000 cycles)
Application Temperature	Between +5°C and +30°C	Step Over Time	24 hours
Flexural Strength	≥ 9 N/mm ²	Reaction to Fire	A1
Compressive Strength	≥ 70 N/mm ²		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Ensures non-dusting, bright, smooth surface floors.
- Easy to clean.
- Improves concrete impermeability.
- Oxidation-free.
- Improves abrasion and impact resistance of surface.
- Creates a surface resistant to freeze-thaw cycle.
- Ensures saving of time thanks to ease and rapid application.
- Economic.
- Three different colour options.

Areas of Use

- Indoor and outdoor spaces
- Floor of industrial facilities
- Hangars, warehouses and mechanics workshops
- Garages and parking lots
- Subway stations
- Gas stations
- Waterfronts and loading ramps, and similar places where surface abrasion is high

Surface Preparation

The load bearing concrete of the application surface should be minimum class C25.

Surface of the fresh concrete where the application is planned should be finished with finishing tray and leveled with wooden trowel.

Consistency of concrete is vital for sound application. If applied on overly consistent concrete, the floor hardener will not react since it cannot incorporate sufficient amount of water, whereupon the hardening does not take place. If the concrete is too slurry, then the hardener is caught up in concrete and remains ineffective.

Wait until the bearing concrete can be walked on. The ideal time is when 0.5-1.5 cm deep footprints left when stepped on the concrete.

Application Information

Roughly 2/3 of YAPIFINE BASE CORUNDUM should be spread on the surface. The material should not be left in clusters, distributed as homogenous as possible.

Also, avoid spreading to long distances not to decompose the aggregates in the product. This process can be done manually or by special spreading equipment.

Wait scattered material to change colour by absorbing the water of the concrete.

The material should be rubbed into the surface with low cycle rotary float (mechanical trowel) and be ensured to integrate with the concrete.

The same process is repeated for the remaining material.

Once the surface hardens to such extent that it allows to be walked thereon, the final finishing should be performed by high cycle finishing. Switch to knife finishing and continue this process until the desired glossiness is achieved.



Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen.

Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

The application area should be protected from the effects of wind and direct sunlight.

After the surface hardening application is complete, apply YAPIFINE CURE ACR, surface curing agent, in order to prevent the formation of contraction cracks and dusting.

Water and cement content of the concrete may cause slight colour variances.

Avoid contact with water on application surface.

Efflorescence may occur at relative humidity conditions lower than 40%.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 25 kg kraft bag

Consumption

4,0 - 8,0 kg/m² depending on intended use and traffic load

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes or accidental ingestion of the product seek immediate medical attention. Rinse with plenty of water in case of contact with the skin.

Since it is cement based, do not breathe its powder.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE BASE® MIX

Surface Hardener with Corundum and Quartz Aggregates

Product Description

Cement based, quartz-corundum aggregate surface hardener and performance booster additives, applied in monolithic manner on fresh concrete surfaces. Enhances abrasion resistance of concrete surfaces subject to light, medium and heavy loads.

TECHNICAL PROPERTIES

Appearance	Grey / Red / Green powder	Abrasion Resistance by Taber Abraser	≤ 3 g (H22, 1000 g, 1000 cycles)
Application Temperature	Between +5°C and +30°C	Step Over Time	24 hours
Flexural Strength	≥ 10 N/mm ²	Reaction to Fire	A1
Compressive Strength	≥ 70 N/mm ²		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Ensures non-dusting, bright, smooth surface floors.
- Easy to clean.
- Improves concrete impermeability.
- Oxidation-free.
- Improves abrasion and impact resistance of surface.
- Creates a surface resistant to freeze-thaw cycle.
- Provides time savings due to the easy and rapid application.
- Economic.
- Three different colour options.

Areas of Use

- Indoor and outdoor spaces
- Walkways and sidewalks
- Floor of industrial facilities
- Hangars, warehouses and mechanics workshops
- Garages and parking lots
- Subway stations
- Gas stations
- Waterfronts and loading ramps, and similar places where surface abrasion is high

Surface Preparation

The load bearing concrete of the application surface should be minimum class C25.

Surface of the fresh concrete where the application is planned should be finished with finishing tray and leveled with wooden trowel.

Consistency of concrete is vital for sound application. If applied on overly consistent concrete, the floor hardener will not react since it cannot incorporate sufficient amount of water, whereupon the hardening does not take place. If the concrete is too slurry, then the hardener is caught up in concrete and remain ineffective.

Wait until the bearing concrete can be walked on. The ideal time is when 3-5 mm deep footprints are left when stepped on the concrete.

Application Information

Roughly 2/3 of YAPIFINE BASE MIX should be spread on the surface. The material should not be left in clusters, distributed as homogenous as possible.

Also, avoid spreading to long distances not to decompose the aggregates in the product. This process can be done manually or by special spreading equipment.

Wait for the scattered material to change colour by absorbing the water of the concrete. The material should be rubbed into the surface with low cycle rotary float (mechanical trowel) and be ensured to integrate with the concrete. The same process is repeated for the remaining material. Once the surface hardens to such extent that it allows to be walked thereon, the final finishing should be performed by high cycle finishing. Switch to knife finishing and continue this process until the desired glossiness is achieved. Once concrete attains strength, cut in annular form to create joints and fill these joints with appropriate filling agent.



Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen. Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

The application area should be protected from the effects of wind and direct sunlight. The surface hardening application is complete, YAPIFINE CURE ACR, surface curing agent, in order to prevent the formation of contraction cracks and dusting.

Water and cement content properties of the concrete may cause slight colour variances.

Avoid contact with water on application surface.

Efflorescence may occur at relative humidity conditions lower than 40%.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ 25 kg kraft bag

Consumption

5 – 8 kg/m² depending on intended use and traffic load

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes or accidental ingestion of the product seek immediate medical attention. Rinse with plenty of water in case of contact with the skin. Since it is cement based, do not breathe its powder. For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE BASE® SL**SELF LEVELLING SCREED (2-10 mm)**

Self Levelling Screed

Product Description

Cement based, self levelling, screed with synthetic polymer additive formulated particularly for fine applications.

TECHNICAL PROPERTIES

Appearance	Grey powder	Flexural Strength	$\geq 5 \text{ N/mm}^2$
Pot Life	min. 30 minutes	Compressive Strength	$\geq 25 \text{ N/mm}^2$
Application Temperature	Between +5 °C and +30° C	Adhesive Strength	$\geq 2 \text{ N/mm}^2$
Time Before Use	~ 24 hours	Abrasion Resistance by Bohme Abraser	$\leq 20 \text{ cm}^3 / 50 \text{ cm}^2$
Application Thickness	min. 2 mm / max. 10 mm		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Self-propagates in order to create smooth surface.
- Easy-to-apply, low labour requirement.
- Adheres perfectly even in very small thicknesses without shrinkage, cracking or degradation.
- Suitable for floor-heated areas.

Areas of Use

- Indoor and outdoor spaces
- Housings
- For ensuring a smooth surface beneath finish flooring materials such as PVC, parquet, wood, carpet, ceramic, marble etc.

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

The damaged parts of the concrete, fractures and static cracks on the surface should be repaired with the appropriate YAPIFINE MEND repair mortar first.

Sharp corner and edge joints should be chamfered.

Mixture Preparation

The 25 kg product is slowly poured into 6-6.5 l of clean water.

The mixture is then stirred with a low speed mixer until a homogeneous mixture is obtained.

The fresh mortar should be used within 30 minutes.

Application Information

The prepared fluid mortar is poured onto the surface.

The self levelling mortar's thickness is then adjusted with a steel trowel.

A spiked roller should be used so that no air bubbles remain inside the mortar, the levelling process becomes easier and to make the final surface touches.

Application thickness should not exceed 10 mm on any given layer. The product should be applied in different layers in cases where the thickness is larger than 10 mm.

Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen.

Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

The application area should be protected from the effects of wind and direct sunlight.

The final consumption amount might vary depending on application conditions and surface characteristics.

Depending on temperature and ambient conditions, it can be stepped on after minimum 24 hours. However, it is recommended to wait for minimum 3 days before any beginning any procedures on the surface.

**Packaging**

- 25 kg kraft bag

Consumption

1 mm for thickness of 1,7 kg/m²

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes or accidental ingestion of the product seek immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

Since it is cement based, do not breathe its powder.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS)

YAPIFINE BASE® SL PRIME

Floor Primer

Product Description

Ready-to-use acrylic copolymer based, used before levelling screed operations on highly absorptive floors.

TECHNICAL PROPERTIES

Appearance	White liquid	Application Temperature	Between +5 °C and +30 °C
Density	1.02 kg/L ± 0.03	Dry Time	min. 1 hour
pH	7 - 9		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Perfect adhesion to concrete.
- Increases adherence and prevents dusting.
- When applied beneath screed, it prevents rapid dehydration of screed, as well as formation of cracks and air bubbles.

Areas of Use

- Indoor and outdoor spaces
- Highly absorptive floors
- Before self-levelling operations to prevent dusting and enhance adherence
- To increase adherence of concrete surfaces to be subject to pedestrian traffic against dusting

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

Application Information



Shake before using.

For good penetration and efficiency, apply one layer with brush or roll and leave for drying. Drying time is 60 minutes. The product should be dried prior to further application.

Application Conditions

Ambient temperature: Between +5 °C and +30 °C.

Avoid application under strong wind or direct sunlight.

Avoid application in areas with risk of freeze in 24 hours, as well as those directly exposed to sunlight and wind.

Never apply on wet and humid surfaces.

Do not apply on unstable and loose surfaces.

Do not add any material which is not mentioned in the instructions for the application.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 10 kg , 20 kg and 30 kg plastic buckets

Consumption

0,100 - 0,200 kg/m²



Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes or accidental ingestion of the product seek immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE BASE® EPOXY POWER

Solvent Free Epoxy Based Self Levelling Floor Coating

Product Description

Epoxy based, two component, solvent free and low viscosity self levelling floor coating with high chemical and physical strength.

TECHNICAL PROPERTIES

Colour	Grey / White / RAL Colours	Flexural Strength	25 N/mm ²
Density (+20°C)	1.54 g/cm ³ ± 0.02	Compressive Strength	≥ 45 N/mm ²
Mixture Ratio	3,8/1 (Component A / Component B)	Adhesive Strength to Concrete	≥ 4 N/mm ²
Appearance	Glossy	Adhesive Strength to Metal	≥ 3 N/mm ²
Pot Life (+20°C)	30 minutes	Abrasion Resistance by Taber Abraser	70 mg
Drying Period (at +23°C, 55% relative humidity)	Drying time: 10 hours Time for new coat: 8-24 hours Through-dry time: 7 days	Hardness (Shore D) (7 days)	76
Temperature Resistance	121°C dry	Permeability to Water Vapour	Class 1
Application Temperature	+10°C ile +30°C	Capillary Water Absorption	≤ 0,5 kg/(m ² .h ^{0.5})
		Permeability to CO ₂	Sd > 50
		Reaction to Fire	E

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- High chemical strength against alkali, dilute acid, sewage, water, oil products, mineral oils and fuels.
- High mechanical strength and abrasive strength.
- Provides good film after curing. Creates joint-free surface.
- Easy to clean thanks to smooth surface.
- Easy to apply.

Areas of Use

- Indoor and outdoor spaces
- Food production and storage facilities
- Shopping malls and supermarkets
- Areas subject to light-medium industrial loads
- Sewage and waste plants
- Parking lots, walking trails
- Pulp and paper factories
- Refineries, warehouses and factories

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

Such materials as mortar and cement residues should be peeled off.

If there is crack, hollow on the floor or wall, YAPIFINE MEND EPOXY 2C repair mortar can be applied.

Surface moisture should not exceed 4% pbw.

Do not apply on concrete surfaces with rising humidity conditions.

Surface's pull strength should be min. 1.5 N/mm².

Concrete quality: C25

Screed quality: Min.(EN 13813) CT-C25-F4

Lining

After surface preparation, the surfaces should be primed with YAPIFINE BASE EPOXY PRIME.

Moist surfaces should be primed with YAPIFINE BASE EPOXY PRIME H.

Depending on chosen system thickness, the application is carried out by mixing 0.1-0.3 mm dry silica sand in 1/1 ratio.



Mixture Preparation

Both of the components are stirred inside their respective containers with a low speed mixer first. Afterwards they are added to each other and are then stirred for a few more minutes until a homogeneous mixture is obtained. Depending on the chosen system, it can be used by putting 0.1-0.3 mm dry silica sand with a 30% ratio. The mixture's pot life at +25°C is 40 minutes. Higher temperatures will reduce the mixture's pot life and lower temperatures will increase it. Should not be mixed by hand.

Application Information



The product should be poured on to the surface and spread by a notched trowel. For the better finishing result, turn the notched trowel and smoothen the surface. To obtain an even thickness and get rid of entrained air. 5 minutes after application use the spiked roller in two directions perpendicular to each other. This is especially necessary when the coating has been filled with silica sand. Wait for minimum 4 days before taking into service. Do not keep the equipments in use for more than 40 minutes in the mixture; in case of delay, wash equipments with epoxy thinner. Even though YAPIFINE BASE EPOXY POWER is solvent free, proper ambient ventilation will help protect the operator, prevent condensation on paint film and ensure optimum coating performance. Ventilation should continue during curing as well.

Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen. Should not be applied when the ambient temperature is not within the values of +5°C and +30°C. The application area should be protected from the effects of wind and direct sunlight. Do not step on the surface during first 24 hours after application. Surface should be protected against direct water contact for 48 hours. The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ Tin buckets set of 19 kg + 5 kg set

Consumption

Total theoretical consumption is 0.35 – 0.55 kg/m²

* Consumption may vary depending on chosen system thickness.

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C. The opened material should be used as soon as possible.

Safety Precautions

No smoking should take place during application. The work environment should be well ventilated and should not include any open flames. Since the solvents are heavier than air it should be remembered that they will be in circulation over the floor. The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention. For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE BASE® EPOXY GARAGE

Solvent Free Epoxy Based Textured Floor Coating

Product Description

Epoxy based, two component, solvent free, orange peel textured floor coating.

TECHNICAL PROPERTIES

Colour	Grey / White / RAL Colours	Compressive Strength	$\geq 45 \text{ N/mm}^2$
Mixture Density (+20°C)	1,50 g/ml $\pm$ 0,03	Adhesive Strength to Concrete	$\geq 4 \text{ N/mm}^2$
Mixture Ratio	3,8 / 1 (A component / B component)	Adhesive Strength to Metal	$\geq 3 \text{ N/mm}^2$
Appearance	Glossy	Abrasion Resistance by Taber Abraser	70 mg
Pot Life (+20°C)	40 minutes	Hardness (Shore D) (7 days)	80
Drying Period (at +23°C, 55% relative humidity)	Drying time: 10 hours Time for new coat: 8-24 hours Through-dry time: 7 days	Permeability to Water Vapour	Class 1
Temperature Resistance	121°C dry	Capillary Water Absorption	$\leq 0,5 \text{ kg/(m}^2 \cdot \text{h}^{0,5})$
Application Temperature	+10°C ile +30°C	Permeability to CO2	Sd > 50
		Reaction to Fire	E

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- High chemical strength against alkali, dilute acid, sewage, water, oil products, mineral oils and fuels.
- High mechanical strength and abrasive strength.
- Provides good film after curing. Creates joint-free surface.
- Easy to clean thanks to smooth surface.
- Easy to apply.

Areas of Use

- Indoor and outdoor spaces
- Food production and storage facilities
- Shopping malls and supermarkets
- Areas subject to light-medium industrial loads
- Sewage and waste plants
- Parking lots, walking trails
- Pulp and paper factories
- Refineries, warehouses and factories

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

The damaged sections of the concrete, the fractures and static cracks on the concrete surface should be repaired with the YAPIFINE MEND EPOXY 2C repair mortar.

Surface moisture should not exceed 4% pbw. Do not apply on concrete surfaces with rising humidity conditions.

The application surface's pull strength should be min. 1,5 N/mm².

Concrete quality: C25

Screed quality: Min.(EN 13813) CT-C25-F4

Lining

After surface preparation, the surfaces should be primed with YAPIFINE BASE EPOXY PRIME. Moist surfaces should be primed with YAPIFINE BASE EPOXY PRIME H.

Depending on chosen system thickness, the application is carried out by mixing 0.1-0.3 mm dry silica sand in 1/1 ratio.

Mixture Preparation

Both components are stirred in their respective containers first. Afterwards they are added together and are then mixed for a few more minutes until a homogeneous mixture is obtained.

Higher temperatures will shorten the pot life, while lower temperatures will extend it.

Pot life of mixture is 40 minutes at +25°C. Higher temperatures extend the pot life, while lower temperatures shorten it.

Should not be mixed by hand.



Application Information



The product should be poured on to the surface and spread by a notched trowel. For the better finishing result, turn the notched trowel and smoothen the surface. To obtain an even thickness and get rid of entrained air. 5 minutes after application use the spiked roller in two directions perpendicular to each other. This is especially necessary when the coating has been filled with silica sand.

Wait for minimum 4 days before taking into service.

Do not keep the equipments in use for more than 40 minutes in the mixture; in case of delay, wash equipments with epoxy thinner. Even though YAPIFINE BASE EPOXY GARAGE is solvent-free, proper ambient ventilation will help protect the operator prevent condensation on paint film and ensure optimum coating performance.

Ventilation should continue during curing as well.

Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen.

Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

The application area should be protected from the effects of wind and direct sunlight.

Do not step on the surface during first 24 hours after application. Surface should be protected against direct water contact for 48 hours.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ Tin buckets set of 19 kg + 5 kg

Consumption

Total theoretical consumption is 0.50 – 0.8 kg/m².

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

The opened material should be used as soon as possible.

Safety Precautions

No smoking should take place during application.

The work environment should be well ventilated and should not include any open flames.

Since the solvents are heavier than air it should be remembered that they will be in circulation over the floor.

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE BASE® EPOXY PRIME

Solvent Free Epoxy Based Primer

Product Description

Epoxy based, two component, solvent free, low viscosity concrete primer.

TECHNICAL PROPERTIES

Colour	Transparent	Thinning	Ready to use
Density (+20°C)	1.10 g/cm ³ ± 0.05	Temperature Resistance	121°C dry
Mixture Ratio	6 / 1 (Component A / Component B)	Compressive Strength	≥ 45 N/mm ²
Appearance	Glossy	Adhesive Strength to Concrete	≥ 1.5 N/mm ²
Pot Life (+20°C)	30 minutes	Hardness (Shore D) (7 days)	83
Drying Period (at +23 °C, 55 % relative humidity)	Drying Time: 6 hours Time for new coat: 8-24 hours Through-dry time: 7 days	VOC (Volatile Organic Compound)	31 g/L
		Reaction to Fire	E

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Solvent-free.
- Multipurpose concrete primer.
- Resistant to general cleaning chemicals.
- Ensures shiny film.

Areas of Use

- Indoor and outdoor spaces
- Shopping malls and supermarkets
- On industrial surface systems as protective coating
- Sewage and waste plants
- Parking lots, walking trails
- Pulp and paper factories
- Warehouses and factories
- PU and epoxy ground systems

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances. The damaged sections of the concrete, the fractures and static cracks on the concrete surface should be repaired with the YAPIFINE MEND EPOXY 2C repair mortar. The surface should be prepared by washing it down with pressurized water and drying it afterwards. After the surface preparation applications the surface's pull strength should be min. 1,5 N/mm². Surface moisture should not exceed 5% pbw.

Do not apply on concrete surfaces with rising humidity conditions. Moist surfaces should be primed with YAPIFINE BASE EPOXY PRIME H.

Mixture Preparation

Both components are stirred in their respective containers first. Afterwards they are added together and are then mixed for a few more minutes until a homogeneous mixture is obtained.

Higher temperatures will shorten the pot life, while lower temperatures will extend it. Should not be mixed by hand.

Application Information



Product can be applied by roller, brush or squeegee. Continuous, non-porous layer of application should be ensured. If the surface of the primer is going to be covered with an epoxy or polyurethane coating; approximately 1 kg/m² of silica sand (0,1-0,3 mm) should be spread on the surface while it is still tacky. Do not keep the equipments in use for more than 30 minutes in the mixture; in case of delay, wash equipments with epoxy thinner. Even though YAPIFINE BASE EPOXY PRIME is solvent free, proper ambient ventilation will help protecting the operator, prevent condensation on paint film and ensure optimum coating performance. Ventilation should continue during curing as well.



Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen. Should not be applied when the ambient temperature is not within the values of +5°C and +30°C. Avoid application under strong wind or direct sunlight. Do not step on the surface during first 24 hours after application. Surface should be protected against direct water contact for 48 hours. The indicated consumption amount is in general sense. It may vary depending on application conditions and surface characteristics.

Packaging

■ Tin buckets set of 12 kg + 6 kg

Consumption

Total theoretical consumption is 0.20 – 0.50 kg/m²

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

The opened material should be used as soon as possible.

Safety Precautions

No smoking should take place during application.

The work environment should be well ventilated and should not include any open flames. Since the solvents are heavier than air it should be remembered that they will be in circulation over the floor. The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention. For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE BASE® EPOXY PRIME H

Solvent Free Humidity Tolerant Epoxy Based Primer

Product Description

Epoxy based, two component, solvent free, low viscosity damp concrete primer.

TECHNICAL PROPERTIES

Colour	Transparent	Thinning	Ready to use
Density (+20°C)	1.10 g/cm ³ ± 0.05	Temperature Resistance	121°C dry
Mixture Ratio	2 / 1 (A component / B component)	Compressive Strength	≥ 45 N/mm ²
Appearance	Glossy	Adhesive Strength to Concrete	≥ 1.5 N/mm ²
Pot Life (+20°C)	30 minutes	Hardness (Shore D) (7 days)	83
Drying Period (at +23 °C, 55 % relative humidity)	Drying time: 6 hours Time for new coat: 8-24 hours Through-dry time: 7 days	VOC (Volatile Organic Compound)	31 g/L
		Reaction to Fire	E

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Solvent-free.
- Applicable as coating primer for highly humid concrete surfaces.
- Multipurpose concrete primer.
- Resistant to general cleaning chemicals.
- Provides appropriate mixture ratio (2/1).
- Ensures shiny film.

Areas of Use

- Indoor and outdoor spaces
- Shopping malls and supermarkets
- On industrial surface systems as protective coating
- Sewage and waste plants
- Parking lots, walking trails
- Pulp and paper factories
- Warehouses and factories
- PU and epoxy ground systems

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

The damaged sections of the concrete, the fractures and static cracks on the concrete surface should be repaired with the YAPIFINE MEND EPOXY 2C repair mortar.

After the surface preparation applications the surface's pull strength should be min. 1,5 N/mm².

Mixture Preparation

Both of the components are stirred inside their respective containers with a low speed mixer first.

Afterwards they are added to each other and are then stirred for a few more minutes until a homogeneous mixture is obtained.

The mixture's pot life at +25°C is 30 minutes.

Higher temperatures will reduce the mixture's pot life and lower temperatures will increase it.

Should not be mixed by hand.

Application Information



Can be applied by roller, brush or squeegee. Continuous, non-porous layer of application should be ensured. If the surface of the primer is going to be covered with an epoxy or polyurethane coating; approximately 1 kg/m² of silica sand (0,1-0,3 mm) should be spread on the surface while it is still tacky.

Do not keep the equipments in use for more than 30 minutes in the mixture; in case of delay, wash equipments with epoxy thinner. Even though YAPIFINE BASE EPOXY PRIME H is solvent-free, proper ambient ventilation will help protecting the operator, prevent condensation on paint film and ensure optimum coating performance. Ventilation should continue during curing as well.



Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen. Should not be applied when the ambient temperature is not within the values of +5°C and +30°C. Avoid application under strong wind or direct sunlight. Do not step on the surface during first 24 hours after application. Surface should be protected against direct water contact for 48 hours. The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ Tin buckets set of 12 kg + 6 kg

Consumption

Total theoretical consumption is 0.20 – 0.50 kg/m²

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C. The opened material should be used as soon as possible.

Safety Precautions

No smoking should take place during application. The work environment should be well ventilated and should not include any open flames. Since the solvents are heavier than air it should be remembered that they will be in circulation over the floor. The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention. For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE BASE® PU

Two Component Polyurethane Based Self Levelling Coating

Product Description

Polyurethane based, solvent free, two component, self levelling glossy floor coating with high chemical abrasive strength and crack bridging feature.

TECHNICAL PROPERTIES

Colour	White / Grey / Terracotto / Blue / Green	Adhesive Strength to Concrete	$\geq 2 \text{ N/mm}^2$
Mixture Ratio	4,5 / 1 (A component / B component)	Tensile Strength	$\geq 50 \text{ N/mm}^2$
Pot Life (+20°C)	25 minutes	Abrasion Resistance by Taber Abraser	70 mg
Density (+20°C)	1.60 g/cm ³	Hardness (Shore D) (7 days)	83
Application Temperature	Between +5°C to +30°C	Permeability to Water Vapour	Class 1
Step Over Time	16 hours	Capillary Water Absorption	$\leq 0.5 \text{ kg/(m}^2 \cdot \text{h}^{0.5})$
Full Cure	48 hours	Permeability to CO ₂	Sd > 50
Resistance Against Chemical and Mechanical Loads	7 days	Reaction to Fire	E

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Solvent-free.
- Resistant against friction and abrasion.
- Elastic structure.
- Ensures joint-free, monolithic surface.
- Easy to clean.
- Hygienic.
- Does not require maintenance for a long time.
- Easy to apply.

Areas of Use

- Factories
- Storage areas
- Parking lots
- Concrete floors requiring chemical and mechanical strength
- Floors requiring high abrasive resistance and strength
- Stores and offices
- Cold storages
- Schools and hospitals

Surface Preparation

The concrete floor should be clean, strong and at a minimum standard of C25 and preferably on a C30 - C35 standard. Concrete surfaces should be prepared so as to ensure porous surface upon removing cement grout. Surface moisture should not exceed 4% pbw. Do not apply on concrete surfaces with rising humidity conditions. Application surfaces should be sound, clean, dust-free, and free from molding oils, curing material, bitumen and other foreign substances. Such materials as mortar and cement residues should be peeled off. If possible the surface should be cleaned by washing it down with pressurized water and drying afterwards.

Lining

Prefer YAPIFINE BASE EPOXY PRIME for lining. Lining agent is applied on surface in an even manner with appropriate brush, without allowing ponding. Once the primer dries, proceed to application. In case surface humidity is found to be beyond standards, prefer YAPIFINE BASE EPOXY PRIME H Humidity-Tolerant Primer.

Mixture Preparation

Component A is stirred in its own container with a low speed mixer (300-400 rpm) until it becomes homogeneous. Afterwards Component B is added into A and the mixture is stirred for 2 more minutes for it to become homogeneous as well. Avoid overmixing in order to lessen the effects of air entrainment.



Application Information



Before beginning the application the relative humidity and the dewpoint should be checked, and then begin the application only if the appropriate conditions are met. YAPIFINE BASE PU is poured onto the primed surface. The product is then spread onto the surface with a notched trowel. Afterwards a spiked roller is used in order to remove the trapped air from the material. The prepared mixture should be used within 40 minutes.

Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen. Should not be applied when the ambient temperature is not within the values of +5°C and +30°C. The application area should be protected from the effects of wind and direct sunlight. Do not step on the surface during first 24 hours after application. Surface should be protected against direct water contact for 48 hours. The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ Tin buckets set of 22 kg. (18 kg + 4 kg)

Consumption

2.4 kg/m² for 1.5 mm thickness (without sand)

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C. The opened material should be used as soon as possible.

Safety Precautions

No smoking should take place during application. The work environment should be well ventilated and should not include any open flames. Ensure well ventilation in enclosed spaces. Since the solvents are heavier than air it should be remembered that they will be in circulation over the floor. The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention. For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE BASE® PU ALF

UV-Resistant Polyurethane Based Top Coating

Product Description

One component, aliphatic polyurethane based top coating curing with humidity in air, offering high UV-resistance.

TECHNICAL PROPERTIES

Colour	RAL Colours	Adhesive Strength to Concrete	$\geq 2 \text{ N/mm}^2$
Density (+20°C)	0.97 g/cm ³ ± 0,03	Tensile Strength	$\geq 50 \text{ N/mm}^2$
Appearance	Glossy	Abrasion Resistance By Taber Abraser	70 mg
Pot Life (+20°C)	30 minutes	Hardness (Shore D) (7 days)	60
Temperature Resistance	100 days at +80 °C	Permeability to Water Vapour	Class 1
	Dry sudden heat of +200 °C	Capillary Water Absorption	$\leq 0.5 \text{ kg/(m}^2 \cdot \text{h}^{0.5})$
Application Temperature	Between +5°C to +30°C	Permeability to CO ₂	Sd > 50
Full Cure	48 hours	Rupture - Expansion Percentage (+23°C)	$\geq \% 50$
Resistance Against Chemical and Mechanical Loads	7 days	QUV	2000 hours
		Reaction to Fire	E

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- High UV-resistance.
- Ceaseless adhesion to application surface ensures transparent film.
- Thanks to aliphatic structure, does not discolour or blench upon exposure to sunlight.
- Easy to apply.
- Removes the possibility of leakage since it doesn't cause any joint formations.
- High adhesion.
- Preserves mechanical characteristics in temperatures between -40°C and +80°C.
- High chemical and mechanical resistance.

Areas of Use

- Indoor and outdoor places
- Surfaces requiring high abrasive strength
- Areas with intense pedestrian traffic
- Stadia, parking lots
- Materials such as marble, ceramics and natural stones
- Roofs, terraces, verandas and balconies
- Industrial floors

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

The damaged sections of the concrete, the fractures and static cracks on the concrete surface should be repaired with the YAPIFINE MEND repair mortar. The applicaiton of the YAPIFINE BASE PU ALF should be started 3-4 days later.

Dynamic cracks should be filled with YAPIFINE GOOP HYBRID or YAPIFINE GOOP sealant.

The surface should be prepared by washing it down with pressurized water and drying it afterwards.

Lining

Use YAPIFINE HYDRA PU PRIME or YAPIFINE BASE EPOXY PRIME for absorptive surfaces such as concrete, cement, screed, wood etc. (Maximum humidity on these surfaces should be 5%).

Prefer YAPIFINE BASE EPOXY PRIME H for lining on humid surfaces.

Use YAPIFINE HYDRA PU TILE PRIME on non-absorptive surfaces such as metal, ceramic or former coating.

Apply with brush or roller. Waiting period between coats should not exceed 48 hours. If it does and in case you are not sure about adherence between layers, use YAPIFINE HYDRA PU PRIME.



Mixture Preparation

Before use, unpack and blend for a few minutes with a low-speed mixer. Avoid high amounts of air to intervene with the agent during mixture preparation. Otherwise, bubbles may occur on cured film.

Application Information



Apply at least 2 layers by brush, roller or airless spray. Do not apply more than 200 gr/m² in a single coat.

Waiting period between coats should not exceed 48 hours.

Clean the tools used for application within 2 hours. Cured material can only be removed mechanically.

Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen.

Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

The application area should be protected from the effects of wind and direct sunlight.

After application, the surfaces must be protected against external influences such as water, rain, snow until it's completely dry.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ 20 kg tin bucket.(18 kg +2 kg)

Consumption

0.1-0.15 kg/m² for each layer. Apply one or two coats. Total theoretical consumption is 0.1 - 0.25 kg/m².

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +5°C and +25°C.

The opened material should be used as soon as possible.

Safety Precautions

No smoking should take place during application.

The work environment should be well ventilated and should not include any open flames.

Ensure well ventilation in enclosed spaces.

Since the solvents are heavier than air it should be remembered that they will be in circulation over the floor.

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

Product Description

Acrylic resin based curing material, applied on freshly poured concrete; retains the water on concrete thanks to film layer it creates and prevents rapid loss of water, as well as shrinkage and cracking.

TECHNICAL PROPERTIES

Appearance	White liquid	pH	7 - 9
Structure	Acrylic Copolymer Based	Drying Time	2 hours
Application Temperature	Between +5°C and +30°C	Service Temperature	-20°C / +70°C
Density	1 kg/L ± 0,03		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Economic and effective curing agent.
- Applicable with brush, roll or spray.
- Film layer detains sufficient humidity necessary for complete hydration of cement in order to obtain required concrete strength.
- Prevents formation of shrinkage and cracks.
- Dust-free; ensures more solid surface.
- All applications with cement or resin basis can be made on cured surfaces.

Areas of Use

- Indoor and outdoor spaces
- For curing horizontal and vertical construction elements
- Airports and field concrete
- Channel concrete
- Floor-hardening applications
- While pouring concrete in areas with low humidity and high evaporation and airstream

Application Information

YAPIFINE CURE ACR is ready to use. Shake before using. Can be applied by a roller or a spraying machine onto freshly poured concrete. If second layer application is required; second layer should be applied 6 hours after the first layer application. In case of a roller application it should be applied as a thin layer. The material should be evenly distributed all throughout and it should be made sure that pooling does not occur.

Application Conditions

Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

The application area should be protected from the effects of wind and direct sunlight.

Avoid application where there is a risk of frost in the first 24 hours after the application or in areas open to direct sunlight or wind. Make sure the surface of application is not exposed to precipitation until it sets.

Do not add any material which is not mentioned in the instructions for the application.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 30 kg plastic drum
- 210 kg barrel

Consumption

Roll applications: 150 - 200 g/m²

Spray applications: 200 - 250 g/m²

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +5°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention. Rinse with plenty of water in case of contact with the skin. For further information on the safe handling of this product please read the Safety Data Sheet (SDS).





YAPIFINE



MOLD RELEASE AGENTS & MORTAR ADDITIVES

- Mold Release Agents
- Mortar Additives

“Performance enhancing auxiliary products that are used in construction sites.”



YAPIFINE® LATEX

Adherence Enhancer & Waterproofing Additive

Product Description

Acrylic dispersion based, adherence improving primer and waterproofing screed, plaster and concrete additive.

TECHNICAL PROPERTIES

Appearance	White liquid	Pot Life (20°C)	~60 minutes
Chemical Structure	Acrylic emulsion	Drying Time (minutes)	135 minutes
Density	1.02 kg/L ± 0.03	pH	7 - 9

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Perfect adherence and elasticity.
- Ensures waterproofing.
- Establishes stable and permanent bond.
- Decreases surface absorptiveness once applied on absorptive surfaces.
- High resistance against oil and salt solutions.
- Dries without crack and abrasion resistant.
- Enhances chlorine impermeability.
- Does not lead to corrosion and saponification.

Areas of Use

- Used as primer under self-spreading screed in and on
- As admixture for improving waterproofing of interior and exterior plasters at reinforced concrete silos, water tanks, pools and treatment plants
- As adherence admixture in mortars prepared for repairing disturbed concrete surfaces, screeds and plasters
- To ensure adherence between old and new concrete
- Engineering structures such as subway, highway, tunnel and dam
- To prevent dusting and cracking of screed

Application Conditions

To increase the adherence and water impermeability in concrete, the mixing properties of concrete sample decided to be poured on the construction site are as follows.

Concrete Class	C 25
Maximum Grain Diameter	22 mm
Cement (CEM 1 42,5 R)	370 kg
Water / Cement (W/C) Rate	0.49
Crushed Sand (0-5 mm)	454 kg
Stone Dust	335 kg

Aggregate (5-12 mm)	468 kg
Aggregate (12-22 mm)	454 kg
Super Plasticiser	3.7 kg
Air Content	% 1.5
Slump	16 cm

Determining Amount of Yapifine Latex to be used as to water within concrete

Determining water included in the concrete	42,25 kg
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Water: from 1:1 to 1:4	Taken up to 1:4 in sampling.
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Application Information

YAPIFINE LATEX is used from 1: 1 to 1: 4 of the water used in concrete. It is poured into the truck mixer arriving into the building site. The concrete mixer is stirred for 5 minutes at high speed. The concrete is placed in the mold. Concrete prepared with YAPIFINE LATEX is recommended to be used for special purposes. It minimizes the chlorine and water impermeability.

To increase the adherence and water impermeability in screed:

At the building site, 50 kg of cement for 150 kg of sand is prepared as a dry mixture. YAPIFINE LATEX is poured into a clean barrel in 30 kg bins. Then 4 drums of water are poured into the barrel. Depending on the humidity in the sand, the YAPIFINE LATEX: Water ratio can be changed from 1:1 to 1: 4. The barrel is mixed homogeneously. The prepared dry mortar is opened by mixing with YAPIFINE LATEX and water mixed liquid form.

In order to increase the adhesion between the old and the new concrete or to use it as a base coating before plaster: It is used to prevent cold joint formation on new concrete or screed applications on old concrete and to increase adherence. A: 1 kg of cement and 3 kg (0 - 3 mm) washed stream sand is mixed. B: 1 kg of YAPIFINE LATEX is mixed with 2 kg of water. Mixtures A and B are mixed together until the mixture has a thick consistency. The prepared mixture is applied on the surface soaked with a brush for 12 hours beforehand to a thickness of 2 mm. Before the mortar dries within 20 minutes, plaster, screed and concrete applications are also done on top of it.



Application Information (Cont.)

If it is to be used as rough before plastering: Prepared mortar is sprinkled rapidly on concrete surface with trowel. Rough or fine plaster is applied next day after the rough rendering is dried.

To increase the water impermeability in the plaster: At the building site, 50 kg of cement for 150 kg of sand is prepared as a dry mixture. YAPIFINE LATEX is poured into a clean barrel from 30 kg bins. Then 4 bottles of water are poured into the barrel. Depending on the humidity in the sand, the YAPIFINE LATEX: Water ratio can be changed from 1:1 to 1: 4. The barrel is mixed homogeneously. The dry mortar is added to the prepared liquid mixture and then they are mixed together as well. Then the application may begin with a trowel.

Application Conditions

Ambient temperature: Between +5 °C and +30 °C. Avoid application under strong wind or direct sunlight. Avoid application in areas with risk of freeze in 24 hours, as well as those directly exposed to sunlight and wind. Never add any material not indicated in operation manual. The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ 10 kg and 30 kg plastic drum

Consumption

YAPIFINE LATEX/Water Rate is between 1:1 and 1:4.

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention. Rinse with plenty of water in case of contact with the skin. For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE® CRYSTAL

Crystallized Waterproofing Concrete and Mortar Additive

Product Description

Concrete additive that provides waterproofing by causing crystallization in the concrete.

TECHNICAL PROPERTIES

Appearance	Brown liquid	Chlorine Content	< 0.1 (EN 480-10)
Density	1.13 kg/L ± 0.03	Alkaline Content	< 5 (EN 480-12)
pH	8 - 12		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Improves workability of concrete.
- Enables easy placement and compaction of concrete.
- Helps to achieve a denser concrete and smooth surface.
- Increases water tightness.
- Improves durability and strength of concrete.

Areas of Use

- Water tanks
- Canals
- Water structures
- Swimming pools
- Waste water treatment pools
- Tunnels and culverts
- All concrete structures where waterproofing is required

Application Information

Added to the mixing water or used by directly adding to the fresh concrete. Concrete mix design and admixture dosage should be determined by laboratory tests according to the concrete class and properties.

Application Conditions

Do not add any substance which is not mentioned in the instructions for the application.

The stated amount of consumption is general information. It may vary depending on application conditions and surface properties.

Packaging

- 30 kg plastic drum
- 250 kg barrel
- 1000 kg container

Consumption

YAPIFINE CRYSTAL is used 1-2% of total binder weight.

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

The packaged product should be shaken before use.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE® LUB 10

Mould Release Agent

YAPIFINE



Product Description

High quality, mineral oil based release agent, resistant against steam curing; ensures releasing moulds from concrete surface in smooth and stainless manner.

TECHNICAL PROPERTIES

Appearance	Clear yellow liquid	Application Temperature	Between +5°C and +30°C
Structure	Mineral oil based	pH	8 - 9
Density	0.90 kg/L ± 0.03		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Ensures smooth and easy mould casting.
- Ensures smoother concrete surface.
- Extends mould service life.
- Does not harm the concrete nor the molds.
- Not affected by cold or heat.
- Ready-to-use and easy to apply.

Areas of Use

- Smooth moulds with low absorptiveness
- Steel, plywood and wooden moulds
- Detailed and large-surface concrete moulds

Application Information



Application surfaces should be sound, clean, dust-free, and free from molding oils, curing material, bitumen and other foreign substances.

Such materials as mortar and cement residues should be peeled off.

There should be no water accumulation on the surface.

Applicable with a spraying machine, brush or a roller on clean mould surfaces. The product should be applied in thin layers. Excessive use of oil leads to stains on the concrete surface.

Avoid oil ponding on mould. Any oil ponding should be removed with sponge, cloth etc.

Two coats may be required on highly absorbant surfaces.

Application Conditions

Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

Moulds should be dry and clean, and free from residues of previous applications.

Should be applied as a thin layer for high performance.

After the application, the application area should be protected against adverse weather conditions such as direct sunlight, strong winds, rain and frost.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 30 kg plastic drum, 210 kg barrel

Consumption

For plastering: 25-35 g/m²

For spraying: 40-50 g/m²

Storage and Shelf Life

The shelf life of the product is 24 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE



**TILE ADHESIVES &
GROUTS**

- Cement Based Tile Adhesives
- Cement Based Grouts

“High performance tile adhesives and grouting materials developed for indoor and outdoor applications.”

APPLICATION AREAS	PAGE NO	232	234	236	238	240
	PRODUCTS	YAPIFİNE CERAMIC	YAPIFİNE GRANITE	YAPIFİNE GRANITE FLEX	YAPIFİNE JOINT	YAPIFİNE JOINT FLEX
Small and medium size ceramic, tile applications		■			■	
Large size ceramic, granite applications			■	■		■
Wet areas such as bathrooms, kitchens		■	■		■	■
In areas that are constantly exposed to water such as balconies, terraces, pools and Turkish baths			■	■		■
Places with high pedestrian traffic such as shopping centers, schools and hospitals			■	■		■
Where sudden temperature changes occurs like cold storage depots and over floor heat installations			■	■		■
Marble, natural stone, glass brick applications			■	■		
Underfloor heated floors				■		■
Over ceramic applications				■		■
Application of ceramic on painted surfaces			■	■	■	■
Application of ceramics to surfaces such as gypsum board, betopan			■	■		■
Exterior applications				■		■

THE MEANING OF ABBREVIATIONS ACCORDING TO TS EN 12004

ADHESIVE TYPE	PERFORMANCE CLASS	ADDITIONAL FEATURES
C Cement Based	1 Standard Performance	T Thixotropic / Reduced Slip
D Dispersion Based	2 High Performance	E Extended Open Time
R Reaction Resin Based		F Fast Setting
		S1 Deformable
		S2 Highly Deformable

THE MEANING OF ABBREVIATIONS ACCORDING TO TS EN 13888

ADHESIVE TYPE	PERFORMANCE CLASS	ADDITIONAL FEATURES
CG Cement Based Grout	1 Standard Performance	W Reduced Water Absorption
RG Reaction Resin Based Grout	2 High Performance	A High Abrasion Resistance

Product Description

Easy to apply cement based tile adhesive mortar with a high adhesive strength.

TECHNICAL PROPERTIES

Appearance	Grey powder	Tensile Adhesion Strength After Heat Aging	≥ 0,5 N/mm ²
Pot Life	min. 3 hours	Tensile Adhesion Strength After Freeze-Thaw Cycles	≥ 0,5 N/mm ²
Application Temperature	Between +5°C and +30°C	Open Time Tensile Adhesive Strength (20 minutes)	≥ 0,5 N/mm ²
Service Temperature	-30°C / +80°C	Slip	≤ 0,5 mm
Required Waiting Time for Foot Traffic	8 hours on wall 1 day on floor	Reaction to Fire	A1
Initial Tensile Adhesion Strength	≥ 0,5 N/mm ²		
Tensile Adhesion Strength After Water Immersion	≥ 0,5 N/mm ²		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- High adhesive power.
- No slipping on vertical applications.
- Allows the adjustment of the coating material for a long time.

Areas of Use

- Horizontal and vertical applications
- Adhesion of materials such as small and medium tiles (<33x33) and ceramic with a water absorption rate below 3%
- Wet spaces such as bathroom and kitchen
- Surfaces such as concrete, plaster, screed

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances that would prevent adhesion.

The plaster and weak particles that do not adhere to the surface well enough should be removed from the surface prior to the application.

The damaged sections of the concrete, the fractures and static cracks on the concrete surface should be repaired with the YAPIFINE MEND EPOXY 2C repair mortar.

The application of the YAPIFINE CERAMIC should be started 3-4 days later.

Highly porous substrates such as concrete and cement based render should be wetted with clean water 24 hours before application and should be waited until the water layer disappears.

The application surface should be wetted and it should be kept damp during the application. It is recommended YAPIFINE UNI PRIME.

If they are dusty the back sides of the ceramic tiles should be washed with water.

Mixture Preparation

Pour YAPIFINE CERAMIC on 6-6.5 l of clean water slowly and mix to obtain a homogeneous paste free from lumps.

A low speed mixer is recommended to mix. Do not add any substance which is not mentioned in the instructions for the application.

The prepared mortar is left to rest for 3 minutes so that it matures after which it is mixed for 1-2 more minutes and then it becomes ready for application.



Application Information



The mortar is applied to the surface and its thickness is adjusted with the notched trowel according to the size of the ceramic and the smoothness and evenness of the application surface. As the size of the ceramic increases it is recommended to do a double-sided application. The tiles should then be placed onto the combed mortar surface with the help of a rubber hammer in 15 minutes. Under undesirable weather conditions such as high temperature, low humidity, wind, etc. this time period may decrease. The fresh mortar should be used up within 2.5 - 3 hours. Under no circumstances should the expired mortar be used. The dredge size of the notched trowels according to the ceramic tile sizes:

Tile Size	Recommended Dredge Size	Tile Size	Recommended Dredge Size	Tile Size	Recommended Dredge Size
< 25 cm ²	3 mm	100 - 400 cm ²	6 mm	> 1600 cm ²	10 mm
25 -100 cm ²	4 mm	400 - 1600 cm ²	8 mm		

Application Conditions

For a minimum of 24 hours after application, avoid getting the application surface in contact with water. Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen. Should not be applied when the ambient temperature is not within the values of +5°C and +30°C. The application area should be protected from the effects of wind and direct sunlight during the application process. The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ 25 kg kraft bag

Consumption

Powder consumption of 3-5 kg/ m²

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

Rinse with plenty of water in case of contact with the skin. Since it is cement based, do not breathe its powder.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

Product Description

Cement based, polymer added, advanced porcelain, ceramic, granite, marble, briquette, etc. adhesive mortar with reduced shearing and lengthened open exposure period.

TECHNICAL PROPERTIES

Appearance	Grey / white powder	Tensile Adhesion Strength After Heat Aging	≥ 1 N/mm ²
Pot Life	3 hours	Tensile Adhesion Strength After Freeze-Thaw Cycles	≥ 1 N/mm ²
Application Temperature	Between +5°C and +30°C	Open Time Tensile Adhesive Strength (30 minutes)	≥ 0,5 N/mm ²
Service Temperature	-40°C / +80°C	Sliding	≤ 0,5 mm
Required Waiting Time for Foot Traffic	8 hours on wall 1 day on floor	Reaction to Fire	A1
Initial Tensile Adhesion Strength	≥ 1 N/mm ²		
Tensile Adhesion Strength After Water Immersion	≥ 1 N/mm ²		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Ensures smoothing of adhered coating material for a long period.
- High adhesive strength.
- No sliding on vertical applications.
- Watertight.
- Perfect result in exterior ceramic and granite adhesion processes.

Areas of Use

- Interior and exterior walls and floors
- Terraces and balconies
- Areas with constant exposure to water, such as swimming pools
- Adhesion of large size ceramics (with water absorption ratio of below 3%)
- Areas with temperature difference
- Areas with intense pedestrian traffic such as shopping mall, school, hospital
- On surfaces such as concrete, plaster, screed

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances that would prevent adhesion.

The plaster and weak particles that do not adhere to the surface well enough should be removed from the surface prior to the application.

The damaged sections of the concrete, the fractures and static cracks on the concrete surface should be repaired with the appropriate YAPIFINE MEND repair mortar.

The application surface should be wetted and it should be kept damp during the application. It is recommended to prime highly absorbent surfaces with YAPIFINE UNI PRIME.

If they are dusty the back sides of the ceramic tiles should be washed with water.

Mixture Preparation

Slowly pour YAPIFINE GRANITE into 6-6.5 l of clean water and mix to obtain a homogeneous paste free from lumps.

A low speed mixer is recommended to mix.

Do not add any substance which is not mentioned in the instructions for the application.

The prepared mortar is left to rest for 5 minutes. Afterwards it is mixed for 1-2 more minutes after which application can take place.



Application Information



The mortar is applied to the surface and its thickness is adjusted with the notched trowel according to the size of the ceramic and the smoothness and evenness of the application surface. As the size of the ceramic increases it is recommended to do a double-sided application.

The tiles should then be placed onto the combed mortar surface with the help of a rubber hammer in 30 minutes. Under undesirable weather conditions such as high temperature, low humidity, wind, etc. this time period may decrease.

The fresh mortar should be used up within 3 hours. Under no circumstances should the expired mortar be used.

The dredge size of the notched trowels according to the ceramic tile sizes:

Tile Size	Recommended Dredge Size	Tile Size	Recommended Dredge Size	Tile Size	Recommended Dredge Size
< 25 cm ²	3 mm	100 - 400 cm ²	6 mm	> 1600 cm ²	10 mm
25 -100 cm ²	4 mm	400 - 1600 cm ²	8 mm		

Application Conditions

For a minimum of 24 hours after application, avoid getting the application surface in contact with water.

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen.

Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

The application area should be protected from the effects of wind and direct sunlight during the application process.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ 25 kg kraft bag

Consumption

3 - 5 kg/m²

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

Since it is cement based, do not breathe its powder.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE® GRANITE FLEX

Flexible Granite Ceramic Adhesive Mortar - C2TES1

Product Description

Cement based, advanced adhesive mortar with polymer additive for porcelain, ceramic, granite, briquette etc.; offers increased shear strength and longer open exposure period.

TECHNICAL PROPERTIES

Appearance	Grey / White powder	Tensile Adhesion Strength After Heat Aging	$\geq 1 \text{ N/mm}^2$
Pot Life	3 hours	Tensile Adhesion Strength After Freeze-Thaw Cycles	$\geq 1 \text{ N/mm}^2$
Application Temperature	Between +5°C and +30°C	Open Time Tensile Adhesive Strength (30 minutes)	$\geq 0,5 \text{ N/mm}^2$
Service Temperature	-40°C / +80°C	Sliding	$\leq 0,5 \text{ mm}$
Required Waiting Time for Foot Traffic	8 hours on wall 1 day on floor	Transverse Deformation	$\geq 2,5 \text{ N/mm}^2$
Initial Tensile Adhesion Strength	$\geq 1 \text{ N/mm}^2$	Reaction to Fire	A1
Tensile Adhesion Strength After Water Immersion	$\geq 1 \text{ N/mm}^2$		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Ensures smoothing of adhered coating material for a long period.
- High adhesive strength.
- No sliding on vertical applications.
- Watertight.
- Perfect result in exterior ceramic and granite adhesion processes.

Areas of Use

- Interior and exterior walls and floors
- Terraces and balconies
- Areas with continuous exposure to water, such as swimming pool
- Adhesion of large size ceramics (with water absorption ratio of below 3%)
- Areas with temperature difference
- Areas with intense pedestrian traffic such as shopping mall, school, hospital
- On surfaces such as concrete, plaster, screed

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances that would prevent adhesion.

The plaster and weak particles that do not adhere to the surface well enough should be removed from the surface prior to the application.

The damaged sections of the concrete, the fractures and static cracks on the concrete surface should be repaired with the appropriate YAPIFINE MEND repair mortar.

The application surface should be wetted and it should be kept damp during the application. It is recommended to prime highly absorbent surfaces with YAPIFINE UNI PRIME.

If they are dusty the back sides of the ceramic tiles should be washed with water.

Mixture Preparation

Slowly pour YAPIFINE GRANITE FLEX into 6-6.5 L of clean water and mix to obtain a homogeneous paste free from lumps. A low speed mixer is recommended to mix.

Do not add any substance which is not mentioned in the instructions for the application.

The prepared mortar is left to rest for 5 minutes. Afterwards it is mixed for 1-2 more minutes after which application can take place.



Application Information



The mortar is applied to the surface and its thickness is adjusted with the notched trowel according to the size of the ceramic and the smoothness and evenness of the application surface. As the size of the ceramic increases it is recommended to do a double-sided application.

The tiles should then be placed onto the combed mortar surface with the help of a rubber hammer in 30 minutes. Under undesirable weather conditions such as high temperature, low humidity, wind, etc. this time period may decrease.

The fresh mortar should be used up within 3 hours. Under no circumstances should the expired mortar be used.

The dredge size of the notched trowels according to the ceramic tile sizes:

Tile Size	Recommended Dredge Size	Tile Size	Recommended Dredge Size	Tile Size	Recommended Dredge Size
< 25 cm ²	3 mm	100 - 400 cm ²	6 mm	> 1600 cm ²	10 mm
25 -100 cm ²	4 mm	400 - 1600 cm ²	8 mm		

Application Conditions

For a minimum of 24 hours after application, avoid getting the application surface in contact with water.

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen.

Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

The application area should be protected from the effects of wind and direct sunlight during the application process.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ 25 kg kraft bag

Consumption

3 - 5 kg/m²

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

Since it is cement based, do not breathe its powder.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

Product Description

Cement based, high performance tile grout mortar suitable for joint applications up to 6 mm on linings such as tile and ceramic.

TECHNICAL PROPERTIES

Appearance	Grey / White / Beige powder	Flexural Strength After Freeze - Thaw Cycles	≥ 2,5 N/mm ²
Pot Life	1 hour	Compressive Strength After Freeze - Thaw Cycles	≥ 15 N/mm ²
Application Temperature	Between +5°C and +30°C	Water Absorption	30 minutes ≤ 5 g
Service Temperature	-30°C / +80°C		240 minutes ≤ 10 g
Time Before Use	1 day	Shrinkage	≤ 3 mm/m
Crusting Time (+20°C)	20 minutes	Reaction to Fire	A1
Flexural Strength	≥ 2.5 N/mm ²		
Compressive Strength	≥ 15 N/mm ²		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- No dusting or cracking.
- Resistant to impact and vibration.
- Ensures smooth surface.
- Does not scratch surfaces.
- Long workability.

Areas of Use

- Indoor horizontal and vertical applications
- Pressed brick, glass mosaic, granite joint applications
- Suitable for use in wet spaces such as bathroom and kitchen

Surface Preparation

Make sure the ceramics are properly adhered so they do not move during joint application.

Joint spaces should be freed from any kind of dust, dirt and cement residues that may prevent adherence.

The joint spaces must be clean, free from any residual dust, dirt, cement or any other kind of substances that might prevent adhesion. The in-joint depth should be 2/3 of the thickness of the ceramic.

Joint spaces should be wiped with a sponge and wetted before application.

Mixture Preparation

Pour YAPIFINE JOINT on 6.5 – 7.5 l of clean water slowly and mix to obtain a homogeneous paste free from lumps.

Do not add any substances which are not mentioned in the instructions for the application.

Leave the mixture to rest and mature for 5-10 minutes. After mixing for 1-2 more minutes, the mortar is ready for application.

Prepared mortar should be consumed within 1 hour. Expired mortars should not be used under any circumstances.

Application Information



Fill the joints completely with mortar using the appropriate rubber trowel, making sure the joints are completely compacted. Remove excess mortar on the surface by moving the float diagonally across joints.

When the mixture loses its plasticity and becomes matt, usually after 10-20 minutes, clean the surface with a damp sponge working diagonally to the joints. If cleaning is carried out when the mixture is still plastic, the grout may be dragged from the joint leading to color variations.

Any residue left can be cleaned from the surface with a clean dry cloth.

Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen.

Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 20 kg kraft bag

Consumption

Ceramic Size	Joint Width			
	2 mm	3 mm	4 mm	6 mm
10 x 10 cm	550 g/m ²	700 g/m ²	950 g/m ²	1500 g/m ²
20 x 20 cm	300 g/m ²	400 g/m ²	500 g/m ²	750 g/m ²
25 x 40 cm	200 g/m ²	250 g/m ²	300 g/m ²	500 g/m ²
33 x 33 cm	150 g/m ²	200 g/m ²	250 g/m ²	450 g/m ²

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations. In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention. Rinse with plenty of water in case of contact with the skin. Since it is cement based, do not breathe its powder. For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE® JOINT FLEX

Silicone Added Flexible Tile Grout Mortar (1-6 mm) – CG2WA

Product Description

Cement based, high performance silicone added flexible tile grout mortar for joint applications up to 6 mm on linings such as tile and ceramic.

TECHNICAL PROPERTIES

Appearance	Grey / White / Beige powder	Flexural Strength After Freeze - Thaw Cycles	≥ 2,5 N/mm ²
Pot Life	1 hour	Compressive Strength After Freeze - Thaw Cycles	≥ 15 N/mm ²
Application Temperature	Between +5°C and +30°C	Water Absorption	30 minutes ≤ 2 g
Service Temperature	-30°C / +80°C		240 minutes ≤ 5 g
Time Before Use	1 day	Shrinkage	≤ 3 mm/m
Crusting Time (+20°C)	20 minutes	Abrasion Resistance by Taber Abraser	≤ 1000 mm ³
Flexural Strength	≥ 2.5 N/mm ²	Reaction to Fire	A1
Compressive Strength	≥ 15 N/mm ²		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- No dusting or cracking.
- Resistant to impact and vibration.
- Ensures smooth surface.
- Does not scratch surfaces.
- Long workability period.

Areas of Use

- Interior and exterior horizontal and vertical applications
- Pressed brick, glass mosaic and granite joint applications
- Suitable for use in wet spaces such as bathrooms and kitchens

Surface Preparation

Make sure the ceramics are properly adhered so they do not move during joint application. Joint spaces should be freed from any kind of dust, dirt and cement residues that may prevent adherence. The joint spaces must be clean, free from any residual dust, dirt, cement or any other kind of substances that might prevent adhesion. The in-joint depth should be 2/3 of the thickness of the ceramic.

Joint spaces should be wiped with a sponge and wetted before application.

Mixture Preparation

Pour YAPIFINE JOINT FLEX on 6.5 – 7.5 l of clean water slowly and mix to obtain a homogeneous paste free from lumps. Do not add any substances which are not mentioned in the instructions for the application.

Leave the mixture to rest and mature for 5-10 minutes. After mixing for 1-2 more minutes, the mortar is ready for application. Prepared mortar should be consumed within 1 hour. Expired mortars should not be used under any circumstances.

Application Information



The prepared mortar is filled into the spaces with diagonal moves made with a rubber-ended squeegee or a joint trowel. The excess on the surface is removed with a soft-ended and wet spatula. Depending on the ambient temperature, 10-20 minutes after the application (when the material that was filled into the joint spaces loses its water and becomes dull) the thin joint residue on the surface should be cleaned with circular motions made with a wet sponge. The sponge used in this process should not be too soaked and the sponge should be cleaned frequently.



Application Conditions

Ambient temperature: Between +5 °C and +30 °C.

Avoid application under strong wind or direct sunlight.

The indicated consumption amount is in general sense. The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 20 kg kraft bag

Consumption

Ceramic Size	Joint Width			
	2 mm	3 mm	4 mm	6 mm
10 x 10 cm	550 g/m ²	700 g/m ²	950 g/m ²	1500 g/m ²
20 x 20 cm	300 g/m ²	400 g/m ²	500 g/m ²	750 g/m ²
25 x 40 cm	200 g/m ²	250 g/m ²	300 g/m ²	500 g/m ²
33 x 33 cm	150 g/m ²	200 g/m ²	250 g/m ²	450 g/m ²

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

Since it is cement based, do not breathe its powder.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



YAPIFINE



THERMAL INSULATION SYSTEMS

- Primers
- Cement Based Adhesives
- Cement Based Plasters
- Decorative Plasters

“External thermal insulation systems designed for increasing energy efficiency and thermal comfort of structures.”

YAPIFINE COOL® LY

Adhesive Mortar for Thermal Insulation Panels

Product Description

Cement based, flexible adhesive mortar with polymer additive specially prepared to adhere insulating boards (XPS, EPS, Rock-wool etc.) on surfaces of concrete, brick, gas concrete.

TECHNICAL PROPERTIES

Appearance	Grey powder	Compressive Strength	≥ 6 N/mm ²
Application Temperature	Between +5°C and +30°C	Water Absorption 30 minutes	≤ 5 g
Pot Life	4 hours	Water Absorption 240 minutes	≤ 10 g
Application Thickness	max. 8 mm	Lower Layer Adhesive Strength	≥ 0,5 N/mm ²
Waiting Period for Anchoring	min. 24 hours later	Insulating Board Adhesive Strength	≥ 0,08 N/mm ²
Particle Distribution (over 1 mm sieve)	≤ 1 %	Reaction to Fire	A1
Unit Mass per Volume	≥ 1000 kg/m ³		
Flexural Strength	≥ 2 N/mm ²		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Easy to apply.
- Not affected by changes in temperature.
- Vapour permeable.
- Non-flammable.
- No shrinking or cracking.

Areas of Use

- Indoor and outdoor spaces
- Horizontal and vertical applications
- Any kind of mineral surface
- Adhering insulating boards on surfaces such as exposed concrete, brick, gas concrete etc.

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances that would prevent adhesion.

The plaster and weak particles that do not adhere to the surface well enough should be removed from the surface prior to the application.

The damaged sections of the concrete, the fractures and static cracks on the concrete surface should be repaired with the appropriate YAPIFINE MEND repair mortar at least 24 hours before the application.

Highly absorbant surfaces should be saturated with water before the application. It is recommended to apply YAPIFINE UNI PRIME on absorptive surfaces.

Application thickness should be determined according to how rough and porous the surface is.

Gauge is recommended for areas with defected surfaces or larger areas. Board surface, where the application will be made, should be clean and dry.

Mixture Preparation

Pour YAPIFINE COOL LY on 5.5-6.5 l of clean water slowly and mix to obtain a homogeneous paste free from lumps. A low speed mixer is recommended to mix. Do not add any substances which are not mentioned in the instructions for the application. Leave to rest and mature for 5-10 minutes. Afterwards mix for 1-2 more minutes and the mortar will be ready for application. Consume the prepared mortar within 3 hours. Under no circumstances the expired mortar should be used.

Application Information



With the smoothness of the application surface in consideration, the adhesive mortar is applied to the back of the boards either by dredging or grouping. After the adhesion process, whether or not the boards are aligned on the same level is checked. According to the ambient temperature and surface features, mechanical plugging is applied 24 hours after at the earliest.

Application Conditions

Should not be applied to surfaces that were exposed to sunlight for too long or to surfaces that are too hot or frozen.
 Should not be applied when the ambient temperature is not within the values of +5°C and +30°C.
 The application area should be protected from the effects of wind and direct sunlight.
 Boards that have stayed under sunlight for too long and have lost their effective features should not be used.
 During application, place insulating boards as closely as possible to one another in order to avoid gaps in between.
 The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ 25 kg kraft bag

Consumption

Powder consumption of 4-4.5 kg/m² for polystyrene board
 Powder consumption of 5.5- 6.5 kg/m² for rockwool board

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.
 In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.
 Rinse with plenty of water in case of contact with the skin.
 Since it is cement based, do not breathe its powder.
 For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

Product Description

Cement based and fibre plastering mortar with polymer additive, especially designed for insulation boards (XPS, EPS, Rock-wool etc.).

TECHNICAL PROPERTIES

Appearance	Grey powder	Flexural Strength	$\geq 2 \text{ N/mm}^2$
Pot Life	~3 hours	Compressive Strength	$\geq 6 \text{ N/mm}^2$
Application Temperature	Between +5°C and +30°C	Insulating Board Adhesive Strength	$\geq 0,08 \text{ N/mm}^2$
Application Thickness	3 - 4 mm	Water Absorption	$\leq 0,5 \text{ (kg/m}^2 \cdot \text{dk}^{0,5})$
Porous Unit Mass per Volume of Fresh Mortar	$1700 \pm 200 \text{ kg/m}^3$	Heat Conductivity (λ_{10} , dry, P=%50)	0,75 W/mK
Porous Unit Mass per Volume of Hardened Mortar	$1400 \pm 200 \text{ kg/m}^3$	Water Vapour Permeability Coefficient	$\leq 15 \mu$
		Reaction to Fire	A1

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Easy to apply.
- Resistant against water and frost.
- Flexible.
- No sagging, shrinking or cracking.
- Long functioning period.
- Available for direct paint application.
- Offers high water vapour permeability.

Areas of Use

- Indoor and outdoor spaces
- Plastering of insulating boards of XPS, EPS and Rock-wool

Surface Preparation

The application surface on the board should be clean and dry.

Thermal insulation boards should be well placed in gauge and plumb.

Gaps between boards should be filled with same insulating material or foam depending on their width.

Mixture Preparation

Slowly pour YAPIFINE COOL SH on 6-6.5 l of clean water and mix until a homogeneous mixture free from lumps is obtained. A low speed mixer is recommended for the mixing process. Do not add any substances which are not mentioned in the instructions for the application.

Leave to rest and mature for 5-10 minutes. Afterwards mix for 1-2 more minutes and the mortar will be ready for application. Consume the prepared mortar within 2 hours. Under no circumstances the expired mortar should be used.

Application Information



Apply the mortar on the insulation board using a steel trowel. Notch the first coat of plaster with 4x4 mm tooth thickness notched trowel for homogenous thickness.

Gently press and fit in reinforcement mesh using a steel trowel before the plaster mortar dries. Apply in 10 cm overlaps at the joints of reinforcement mesh.

Second coat can be applied when the first coat dries off. Smoothen surfaces with a steel trowel after the second coat.

The screed application on the thermal insulation boards shouldn't be thicker than 4 mm.

When the screed mortar completely dries off, the last coat that is able to breathe is applied.



Application Conditions

Should not be applied when the ambient temperature is not within the values of +5°C and +35°C.

The application area should be protected from the effects of wind and direct sunlight.

Avoid application where there is frost or there is a risk of frost.

Avoid application where there is a risk of frost in the first 24 hours after the application or in areas open to direct sunlight or wind. Avoid application or take necessary protective measures in case snow or excessive cold weather is expected within about 1 week until the cement is set after application.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ 25 kg kraft bag

Consumption

4 – 5 kg/m²

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

Since it is cement based, do not breathe its powder.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE COOL® DS FINE

Decorative Plaster Mortar - Fine

Product Description

White cement based, water repellent, long lasting, decorative facade mortar with high adhesive strength and polymer additive that ensures decorative finish by minimising application errors.

TECHNICAL PROPERTIES

Appearance	White powder	Water Vapour Transmission Rate	V1
Application Temperature	Between +5°C and +30°C	Water Transmission Rate	W1
Application Thickness	Average 2 mm	Crack Bridging	A0
Complete Dry Time	2 - 3 days	Carbon Dioxide Permeability	C0
Dry Film Thickness	E5	Reaction to Fire	A1
Grain Size	S3		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Easy to apply.
- Long-lasting, non-flammable and does not blister.
- Creates natural texture on surface due to special filling size.
- Allows breathing surfaces due to its water vapour permeable structure.
- Resistant to water and frost.
- Resistant to sudden heat changes; no contraction or peeling.
- Available for painting with house-paint if required.
- Fixes surface errors or defects.

Areas of Use

- Indoor and outdoor spaces requiring durability and decorative look
- Decorative covering on thermal insulation systems

Surface Preparation

Screed surface where the application will be made should be clean and dry.
Surface should be freed from residual materials which may prevent adhesion.
Prior to application, apply YAPIFINE COOL PRIME Decorative Plaster Primer on the surface with brush or roll.

Mixture Preparation

Pour YAPIFINE COOL DS FINE on 6-6.5 l of clean water slowly and mix to obtain a homogeneous paste free from lumps. A low speed mixer is recommended to mix. Do not add any substances which are not mentioned in the instructions for the application.
Leave to rest and mature for 5-10 minutes. Afterwards mix for 1-2 more minutes and the mortar will be ready for application. Consume the prepared mortar within 1,5-2 hours. Under no circumstances the expired mortar should be used.

Application Information



YAPIFINE COOL DS FINE Decorative Plaster Mortar is applied on the surface with a steel trowel. 5 minutes after it is spread homogeneously on the surface, it is given a decoration with a plastic trowel with circular motions. Trowel should be frequently cleaned during decoration.
In case the ambient temperature is high, the application surface is kept wet until the cement sets. Once the surface is fully dry, if desired, it can be painted with house paint.



Application Conditions

Do not apply on horizontal or inclined surfaces.

Application shouldn't be done directly on brick or gas concrete surfaces.

Should not be applied when the ambient temperature is not within the values of +5°C and +35°C.

The application area should be protected from the effects of wind and direct sunlight.

Avoid application where there is frost or there is a risk of frost.

Avoid application where there is a risk of frost in the first 24 hours after the application or in areas open to direct sunlight or wind.

Avoid application or take necessary protective measures in case snow or excessive cold weather is expected within about 1 week until the cement is set after application.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ 25 kg kraft bag

Consumption

2,4 – 2,8 kg/m²

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

Since it is cement based, do not breathe its powder.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

YAPIFINE COOL® DS COARSE

Decorative Plaster Mortar - Coarse

Product Description

White cement based, water repellent, long lasting, decorative facade mortar with high adhesive strength and polymer additive that ensures decorative finish by minimising application errors.

TECHNICAL PROPERTIES

Appearance	White powder	Water Vapour Transmission Rate	V1
Application Temperature	Between +5°C and +30°C	Water Transmission Rate	W1
Application Thickness	Average 2 mm	Crack Bridging	A0
Complete Dry Time	2 - 3 days	Carbon Dioxide Permeability	C0
Dry Film Thickness	E5	Reaction to Fire	A1
Grain Size	S4		

* Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it.

Advantages

- Easy to apply.
- Long-lasting, non-flammable and does not blister.
- Creates natural texture on surface due to special filling size.
- Allows breathing surfaces due to its water vapour permeable structure.
- Resistant to water and frost.
- Resistant to sudden heat changes; no contraction or peeling.
- Available for painting with house-paint if required.
- Fixes surface errors or defects.

Areas of Use

- Indoor and outdoor spaces requiring durability and decorative look
- Decorative covering on thermal insulation systems

Surface Preparation

Screed surface where the application will be made should be clean and dry.
Surface should be freed from residual materials which may prevent adhesion.
Prior to application, apply YAPIFINE COOL PRIME Decorative Plaster Primer on the surface with brush or roll.

Mixture Preparation

Pour YAPIFINE COOL DS COARSE on 6-6.5 l of clean water slowly and mix to obtain a homogeneous paste free from lumps. A low speed mixer is recommended to mix. Do not add any substances which are not mentioned in the instructions for the application.
Leave to rest and mature for 5-10 minutes. Afterwards mix for 1-2 more minutes and the mortar will be ready for application. Consume the prepared mortar within 1,5-2 hours. Under no circumstances the expired mortar should be used.

Application Information



YAPIFINE COOL DS COARSE Decorative Plaster Mortar is applied on the surface with a steel trowel.

5 minutes after it is spread homogeneously on the surface, it is given a decoration with a plastic trowel with circular motions. Trowel should be frequently cleaned during decoration.

In case the ambient temperature is high, the application surface is kept wet until the cement sets. Once the surface is fully dry, if desired, it can be painted with house paint.



Application Conditions

Do not apply on horizontal or inclined surfaces.

Application shouldn't be done directly on brick or gas concrete surfaces.

Should not be applied when the ambient temperature is not within the values of +5°C and +35°C.

The application area should be protected from the effects of wind and direct sunlight.

Avoid application where there is frost or there is a risk of frost.

Avoid application where there is a risk of frost in the first 24 hours after the application or in areas open to direct sunlight or wind.

Avoid application or take necessary protective measures in case snow or excessive cold weather is expected within about 1 week until the cement is set after application.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

■ 25 kg kraft bag

Consumption

2,4 – 2,8 kg/m²

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

Since it is cement based, do not breathe its powder.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).

Product Description

Acrylic copolymer emulsion based plaster primer with high adhesive strength and filling, offering high coverage property for interior and exterior walls.

TECHNICAL PROPERTIES

Appearance	White liquid	Application Temperature	Between +5°C and +30°C
Density	1.55 kg/L ± 0.03	Dry Time (+20°C)	1 hour
pH	7 - 9	Through-dry	6 hours
Pot Life	~2 hours		

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Advantages

- Ready-to-use.
- High adherence.
- Prevents rapid water loss of mortar when applied before cement-based coatings.
- White, with high covering feature.
- Odourless.
- Safely applicable indoors as it is water-based.

Areas of Use

- Horizontal and vertical applications
- Before cement and especially gypsum-based thin plaster applications
- In order to increase adherence before decorative plaster on insulating applications
- Before plaster on former surfaces

Surface Preparation

The surface should be cleaned of all residual materials such as dust, oil, dirt, paint, curing materials, bitumen and other foreign substances.

Application Information

Mix with a low-speed mixer in a clean container, or in its package for at least 3 minutes. Apply to the surface by brush, roller or with a spray.

Application Conditions

Should not be applied when the ambient temperature is not within the values of +5°C and +35°C.

The application area should be protected from the effects of wind and direct sunlight. Avoid application where there is frost or there is a risk of frost. Avoid application where there is a risk of frost in the first 24 hours after the application or in areas open to direct sunlight or wind. Surfaces that are too hot must be wetted before the application. The application surface should be protected from rain until it sets. Do not add any other substances that are not provided in the application manual.

The final consumption amount might vary depending on application conditions and surface characteristics.

Packaging

- 25 kg plastic drum

Consumption

100-150 g/m² per coat

Storage and Shelf Life

The shelf life of the product is 12 months when it is stored on wooden pallets in a cool, dry and moisture free environment with an ambient temperature between +10°C and +25°C.

Safety Precautions

The operator should be wearing proper work attire, goggles, mask and protective gloves appropriate to work and worker safety regulations.

In case of contact with the eyes, rinse with plenty of water before seeking immediate medical attention.

Rinse with plenty of water in case of contact with the skin.

For further information on the safe handling of this product please read the Safety Data Sheet (SDS).



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