



2055-CPR-038

# DEGASET AX 4416

## HIGH RANGE WATER REDUCER / NEW GENERATION SUPER PLASTICIZER ADMIXTURE

### Product Definition

**DEGASET AX 4416** is a high range water reducing, new generation super plasticizer that greatly decreases water/cement ratio to increase workability and mechanical properties of concrete.

### Technical Properties

Chemical Content	Polycarboxylate based
Color, Appearance	Brown liquid
pH	3-7
Density	1,05 ± 0,02 g/cm <sup>3</sup>
Chlorine Content (%)	<0,1 (EN 480-10)
Alkaline Content (%)	<5,0 (EN 480-12)
Compliance with Standards	TS EN 934-2 Table 3.1 and 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.
- DEGASET AX 4416** does not contain chlorine.

### Area 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
- High performance concrete production

### Consumption Dosage

**DEGASET AX 4416** is used 0,8-1,8% of total binder.

### 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 4416** should be added into the rest of water and should be mixed properly.

### Compatibility with other Admixtures

**DEGASET AX 4416** can be combined with the following admixtures. Laboratory tests should be carried out before use.

- Arset Air
- Arset Friz
- Yapiset Fast

### Packing

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

### Storage and Shelf Life

Must be stored at temperatures between +5°C and +35°C. Under proper storing conditions, the product's shelf life is 12 months from production date if kept in original packaging unopened and undamaged. Packaged products must be shaken before use.

### Warning

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

### Safety Measures

Use protective clothes, gloves, glasses and mask compatible with Health and Safety regulations during the application. It should not contact skin and eyes. In case it contacts to skin and eyes, rinse it with water and if swallowed ask for medical help. Food and beverage should not be allowed in the application area. It should be stored at the reach out of the children. The Material Safety Data Sheet (MSDS) should be read for detailed information.

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