

YAPIFINE HYDRA[®] SERUM

Polyurethane Based Injection Resin



Product Definition

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.

Areas of Use

- Foundations, Retention walls, Cracked walls,
- Water tanks, Dams, Tunnels and subways,
- Wastewater and sewage systems,
- Storehouses,
- Filling layers and joints.

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.

Technical Specifications

Colour	Transparent yellow
Density (+20°C)	1.10 g/cm ³ ± 0.03
Viscosity (+25°C)	~ 200 cP
Solid Matter	100 %
Flashpoint	145°C

YAPIFINE SERUM INJ CATALYST	
Colour	Transparent yellow
Density (+20°C)	0.95 g/cm ³ ± 0.01
Viscosity (+25°C)	~ 15 cP
Application Temperature	+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.

 Packaging	Component A: 7.5 kg tin can
	Component B: 0.75 kg tin can

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 3mm 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). AStarting 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.

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).