

CYH-500

Product Data Sheet

One Part Hydrophobic type PU Grouting

Description

CYH-500 is a hydrophobic grout based on polyurethane.

Upon contact with water CYH-500 reacts to flexible closed cell rubber-like foam while expanding its volume up to 30 times. The cured flexible material is of a constant volume. Since water is not a component of the foam structure, the cured material is essentially not affected by water or dryness. The reacted material does not shrink or swell.

Depending on the pressure of injection CYH-500 reacts to a very dense and flexible material or foam.

Uses

Areas of application include:

- ▣ Defective concrete (cracked or honeycombed)
- ▣ Concrete joints
- ▣ Limestone
- ▣ Brick construction
- ▣ Pipe intrusions
- ▣ Waste water tanks
- ▣ Subway(Metro),
- ▣ Sewers, Manholes, Utility boxes, etc.
- ▣ Tunnels, Dams
- ▣ Soil stabilization

Advantages

- ▣ Negative side application possible
- ▣ Deep penetration into very small cracks
- ▣ Foam increases in volume to fill cavities and voids
- ▣ Adjustable gel times
- ▣ Excellent bond to wet surfaces
- ▣ Good adhesive strength, tolerant of movement
Inert after curing, constant volume, no shrinkage
- ▣ Dose not create new cracks

Technical & Physical Data

Form	Liquid
Color	Dark Brown
Solubility in Water	Hydrophobic
Density, g/ml	1.12
Viscosity, c ps (KS F 4923)	100-200
Max. Expansion,	30 times
Induction Time, 20°C/68°F	15 sec
Gel Time, 20°C/68°F	65 sec
Strength (KS M 3734)	2 N/mm ²
Appearance	Light yellow Polyurethane Foam
Corrosiveness	Non-Corrosive
Chemical Resistance	Resistant to more organic Solvent, Mild Acids, Alkali
Shelf Life	1 year when unopened and undamaged
Storage Condition	Store in a dry cool place
Packaging	20 kg/pail

Important Notes

1. Minimum ambient and substrate temperature is 5°C.
2. Material shall be store in a dry cool place.
Good storage stability for unopened containers at 15°C ~ 30°C.

Instruction for Use

STEP 1: Clean Surface

Sometimes the concrete surface is hidden under a surface of mineral deposits left from long-term water leakage.

STEP 2: Drill Injection Holes

In order to inject the resin into the crack, it is necessary to install injection ports, also called mechanical packers.

The depth of the drill hole intersecting the crack should be somewhere close to the center of structure, if possible.

STEP 3: Insert Injection Packers

Place packers in the previously drilled hole, so that the top of the rubber sleeve is below the concrete surface. If the packer can't be pushed into the hole, tap it in. Tighten the packer with a wrench as tight as necessary.

STEP 4: Flush Crack If Necessary

In some circumstances, it can be very useful to flush the crack with water to improve the subsequent penetration of the injection resin into thicker walls.

STEP 5: Crack Injection

Choose the proper resin for the correct application. The nature of the crack / joint and the conditions at the job site determine the choice of material. For general purpose, you may choose CYH-500. Hairline cracks and dry cracks should be sealed using Epoxy putty. Some problems are solved by using a combination of products.

STEP 6: Clean Up

Once the injection work is completed, a good and thorough clean up is essential. The packers can be removed within 1 hour and the holes should be patched by using Epoxy putty.

Cleaning

Tools and equipment just can be clean with acetone or suitable thinner immediately after use.

Safety

Impervious gloves and barrier cream should be used when handling these products. Eye protection should be worn. In case of contact with eyes, wash thoroughly with plenty of water and seek medical advice if symptoms persist. If contact with skin occurs, it must be removed before curing takes place. Wash off with an industrial skin clearer followed by plenty of soap and water. Do not use solvent. Ensure adequate ventilation when using these products.

