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Megapoxy H Rapid Set

MULTI-PURPOSE FAST SETTING LIQUID EPOXY

Description

MEGAPOXY H Rapid Set is a specially formulated hydrophilic liquid epoxy system. It is suitable for applications where a low viscosity, high strength, and fast setting binder is required. Epoxy grade sand and other suitable aggregates can be added to make high strength epoxy grout, mortar or concrete.

Typical Uses

- ⊕ Repair of concrete
- ⊕ Grouting bolts, reinforcement, stanchions and other inserts into concrete
- ⊕ Underwater and splash zone repairs to concrete and timber
- ⊕ Primer for other epoxy systems
- ⊕ Non-slip floors and wear resistant floor toppings with the addition of aggregates

Features

- ⊕ Low viscosity
- ⊕ Fast setting
- ⊕ Easy to mix premeasured kits
- ⊕ Bonds to wet surfaces
- ⊕ High mechanical strengths
- ⊕ Excellent chemical and wear resistance
- ⊕ Excellent moisture tolerance during and after cure
- ⊕ Easy to clean, dense, smooth and seamless

Packaging

Available in two sizes:
4 Litres kit: Part A – 3 litres, Part B – 1 litre
20 Litres kit: Part A – 15 litres, Part B – 5 litres

Technical Data

Product as supplied

- ⊕ Part A epoxy resin – clear or grey liquid
- ⊕ Part B formulated hardener – thin clear liquid

Mix Ratio

3 parts A to 1 part B by Volume

Cured Properties
Mixed viscosity at 23^0C – 300 to 800 cps

Cured Properties

- ⊕ Density approx.: 1.1 kg per litre
- ⊕ Maximum Operating Temperature: 100^0C
- ⊕ Compressive Strength (Ultimate): 120 MPa
- ⊕ Tensile Strength: 50 MPa
- ⊕ Tensile Bond Strength: 13 MPa
- ⊕ Flexural Strength: 60 MPa
- ⊕ Modulus of Elasticity: 1.1×10^4 MPa
- ⊕ Slant Shear Test (new to old concrete): 36 MPa

Chemical Resistance

The following information is based on tests conducted under continuous immersion conditions. In practice, floor and wall coatings would be presumably cleaned regularly and hence reduce the exposure to chemicals. However, in the case of tanks and storage vessels, the exposure would be continuous, and it is on this basis that the following test conditions were applied.

Chemicals with **no effect** on Megapoxy H: distilled water at 40^0C, petrol power kerosene, diesel fuel, crude oil, toluene, MIBK, carbon tetrachloride, styrene monomer, glycerine, hydrochloric acid up to 31% concentration, sulphuric acid up to 70% concentration, chromic acid 1% concentration, acetic acid 5% concentration, tartaric acid 5%, citric acid 5%, linseed fatty acid, sodium, ammonium, hydroxide concentration 15%, liquid detergents, sodium carbonate 10%, sodium bisulphate 10%, methylated spirits, Coca-cola.

Chemicals to which Megapoxy H has **limited resistance**:

Chemical	Breaks down after…
Boiling distilled water	2 weeks
Nitric acid to 55%	80 days
Formaldehyde to 37%	3 months
Vinegar	1 week
Phosphoric acid 57%	24 hours
Lactic acid	15 days
Benzyl alcohol	50 days
Sulphuric acid	24 hours
Cresylic acid	24 hours
Sodium hypochlorite 4%	60 hours

Application Notes - General

For instructions on specific applications, such as the addition of aggregates, new to old concrete and floor toppings, refer to Megapoxy H Technical Bulletins.

Preparation

Good adhesion can only be achieved if proper pretreatment of surfaces to be bonded is carried out. With the exception of concrete, surfaces should be degreased, grit blasted or mechanically abraded and degreased again. Wire brushing is not an adequate surface preparation and will produce minimal adhesion only.

Mixing and Placement

Pour contents of Part B into Part A and mix thoroughly for 3-5 minutes with a power mixer, or flat stirrer by hand. Ensure that all material around the bottom and sides of the container is incorporated. Do no aerate mix. If using fillers or pigments, add to mix. Do not apply at temperatures below 10^{0}C.

Working Time (Pot Life)

8 minutes at 25^{0}C

Cure Time

2 hours at 25^{o}C (1 litre mix)

Cleaning

Spillage and excess should be cleaned up as soon as possible. Uncured Megapoxy H Rapid Set can be removed using Megapoxy Thinners. Once the product has cured only severe heat or prolonged immersion in a powerful solvent will break it down.

Storage

MEGAPOXY H Rapid Set has a shelf life exceeding one year sealed in the original containers and stowed in a dry environment at 15^{0}C to 20^{0}C.

Safety Precautions

Avoid contact with uncured product at all times. Use protective clothing including safety glasses and apply a barrier cream to skin areas that could be exposed. Refer to Material Safety Data Sheets for further information.

First Aid

If swallowed, DO NOT induce vomiting, give a glass of water and contact a Doctor or the Poisons Information Centre. If in eyes, hold eyes open and flood with copious amounts of clean water for at least 15 minutes and contact a Doctor. If skin contact occurs, remove contaminated clothes and wash skin with soap and warm water. If allergic response (irritation, wheezing, etc.) occurs seek medical advice. Refer to Material Safety Data Sheets for further information.

NOTE

As conditions may vary considerably in consuming industries, buyers and users must assess this product's performance for their own requirements.

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