

Megapoxy H

MULTI-PURPOSE LIQUID EPOXY

Description

MEGAPOXY H is a specially formulated hydrophilic liquid epoxy system. It is suitable for applications where a low viscosity high strength 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
- Bonding new to old concrete, primer for mortar repairs
- Underwater and splash zone repairs to concrete and timber
- Bridge bearing pad leveling and grouting
- Primer for other epoxy systems
- Roll on floor coating
- Non-slip floors and wear resistant floor toppings with addition of aggregates

Features

- Low viscosity
- 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 2 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

Viscosity

Mixed viscosity at 23 °C - 600 to 800 cps

Cured Properties

- Density: approx. 1.1 kg per litre
- Maximum Operating Temperatures: 100 °C.
- 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 are cleaned regularly, exposure to chemicals is limited to a few hours at a time and severity of attack is correspondingly reduced. In the case of tank and storage vessel coatings Megapoxy H film is continuously exposed to chemicals. The data given below apply to this condition.

CHEMICALS, WHICH HAVE NO EFFECT ON MEGAPOXY H

Distilled water at 40°C, petrol, power kerosene, diesel fuel, crude oil, toluene, MIBK, carbon tetrachloride, styrene monomer, glycerine, hydrochloric acid all concentrations to 31%, sulphuric acid concentrations to 70%, chromic acid 1%, acetic acid 5%, tartaric acid 5%, citric acid 5%, linseed fatty acid, sodium, ammonium hydroxide concentrations to 15%, liquid detergents, sodium carbonate 10%, sodium bisulphate 10%, methylated spirits, Coca-Cola.

CHEMICALS TO WHICH MEGAPOXY 'H' COATINGS HAVE LIMITED RESISTANCE ONLY

Boiling distilled water	Breakdown after 2 weeks
Nitric Acid to 55%	Breakdown after 80 days
Formaldehyde 37%	Breakdown after 3 mths
Vinegar	Breakdown after 1 week
Phosphoric acid 57%	Breakdown after 24 hours
Lactic acid 5%	Breakdown after 15 days
Benzyl alcohol	Breakdown after 50 days
Sulphuric acid	Breakdown after 24 hours
Cresylic acid	Breakdown after 24 hours
Sodium hypochlorite 4%	Breakdown after 60 hours

Application Notes - General

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

Surface Preparation - General

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 satisfactory giving minimal adhesion only.

Surface Preparation – Concrete

The surface must be free of grease, oil and other contaminants. If necessary clean with industrial grade degreasing agent. Once clean steps must be taken to remove laitance, this is best done by grit blasting, mechanical abrasion and acid etching are alternative methods.

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 all material around bottom and sides of container is incorporated. Do not aerate mix. If using fillers or pigments, add and mix. Do not apply at temperatures below 10°C.

Working Time (Pot Life)

30 minutes at 25°C
15 minutes at 35°C

Cure Time

24 hours at 25°C

Cleaning

Spillage and excess should be cleaned up as soon as possible. Uncured **Megapoxy H** 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 has a shelf life exceeding one year sealed in the original containers and stowed in a dry environment at 15°C to 20°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.

Manufactured by
Vivacity Engineering Pty. Ltd.
A.C.N. 001 666 557
3 Sefton Road Thornleigh NSW 2120
Phone: (02) 875 3044
QUALITY ASSURANCE TO AS 3902
NATA Accreditation. Reg. N^o. 6219



Distributed by

PERMATECH

Phone (08) 9303 4655
Fax (08) 9303 4677

U1 / 4 Achievement Way, Wangara, 6065.