

HYDRO STATIC EPOXY 400

High Performance Waterbased Epoxy

Release: 5 July 2019

PRODUCT DESCRIPTION:

Hydro Static Epoxy 400 is a high quality, high performance two-part, high solids, waterbased epoxy primer / sealer / membrane, used for concrete, masonry, and other cementitious substrates. The product forms a waterproofing barrier thus allowing the application of other moisture sensitive coatings. Hydro Static Epoxy 400 is non flammable, has no odour and can be applied over green concrete. The product forms an excellent binder for dusty and eroded concrete surfaces.

RECOMMENDED APPLICATIONS:

- As a moisture barrier to protect against seepage and dampness.
- As a primer for paints and membranes.
- Reverse tanking.
- As a coating in chemical spill areas.
- As a primer for green concrete.
- Ponds.
- A binder for dusty and eroded concrete surfaces.
- As a waterproofing membrane over green concrete.
- As a waterproofing membrane/ barrier in waste water drains and pits as well as retaining walls.
- As a waterproofing membrane required to contain water
- Sealing concrete slabs for lino and carpet installation.
- Seepage and dampness penetration through walls, retaining walls, basement floors etc.
- As a water barrier for lino and tile installations.

ADVANTAGES:

Very strong cured finish; low odour; easy to use; water clean-up; excellent adhesion to old, new and green concrete, stone, timber, masonry and concrete block. High chemical resistance - prevents rising damp. Safe for use around food - water clean-up.

TECHNICAL /PERFORMANCE DATA:

Resin Base Appearance – White viscous liquid

Chemical base – epoxy resin

Solids – Can vary from a high of 73% to thin films of 15%. The normal range at application viscosities is 45% to 55%

VOCs - (APAS) 0.g/l

Flexibility - comparable to standard solvent based epoxies.

Viscosity – 1000 - 1500 cps

Specific Gravity combined 1.323

Dry Film Thickness - 250 - 300 microns (*3 coats).

HARDENER:

Appearance – Dark grey liquid

Chemical base – polyamine adduct

Mixing ratio – Equal parts of A and B by volume.

Pot life – 2 hours approx. at 25°C. 1.25hrs at 35 deg

GENERAL: Surface appearance – matt.

Recoat Time – 2 hours at 20°C.

Maximum time to over coat - 30 hours.

Complete cure – 4 days at 20°C 50% humidity

Curing temperature range: 10 - 30°C.

VOC - 0 gram/litre.

Hydrostatic Resistance to 35 - 42m head of pressure.

Adhesion: Excellent on a variety of substrates - concrete, steel, green concrete and plastics.

APPLICATION TYPICAL FEATURES: Ideal

Temperature Range: 10–30°C. Do not apply below 5°C and above 35°C. Do not apply when humidity is above 85%. Optimum curing Temperature range is 15–25°C.

- **Will resist hydrostatic pressure to 35 - 42 metres of water depending on application.**

(250 - 300 micron dry coat - 3 coats.)

- Prevents rising damp.
- Suitable for indoor and outdoor application.
- Resistant to oil, petrol, detergents, common soils and detergent cleaners.
- Tolerates poorly prepared surfaces.
- Sealing concrete for lino and tile application.
- Dilution: The product can be diluted up to 20% with clean water for the first penetration coat only.
- As a below ground negative side waterproofing barrier.
- As a waterproofing membrane in tanking applications.

RECOMMENDED COVERAGE:

Dependent on surface porosity and expected service conditions. Recommended coverage as a primer is around 5 - 7 m² on smooth substrates.

The coverage for hydrostatic applications reduces to 1.5 - 3m² per litre, applied in several coats. (This depends on the application system employed (brush or roller) and the porosity of the substrate).

PRIMING WITH HYDRO STATIC 400 EPOXY

Dilute **HydroStatic Epoxy 400** 20% with water as the first priming/penetrating coat..

PRODUCT PREPARATION:

Add hardener to the resin (Part A) and mechanically mix for several minutes until the hardener is completely absorbed into the resin. Allow mixture to mature for 5 – 15 minutes before application. Where only part of the product pack is to be used, it is recommended that the resin base be thoroughly mixed before decanting the amount needed. The application should be completed before the expiry of the pot working life - (2 hours) at 25°C.

APPLICATION: Hydro Static Epoxy 400 may be applied to new (green) concrete as soon as the latter has hardened. Otherwise, the general recommendations for the preparation of concrete surfaces for overcoating should be adhered to. Each successive coat should be applied at right angles to the previous coat.

Hydro Static Epoxy 400 is tolerant with regard to surface preparation. Nevertheless; to maximise adhesion, it is important that application is made to sound clean substrates. For concrete surfaces; remove the laitance by mechanical abrasion, shot blasting, acid etching or diamond grinding. Old concrete should be thoroughly cleaned, preferably with high pressure water cleaning. Contamination with oil or grease should be removed by repeated degreasing or steam cleaning. If penetration of the pores has occurred, grinding back to clean concrete may be required.

Apply one coat for dust sealing or priming; two coats for waterproofing or three coats for hydrostatic applications. Over-coating may be undertaken when the product is touch dry.

Hydro Static Epoxy 400 has been formulated to show optimum curing and application characteristics in the temperature range 10 – 30°C. At lower temperatures the rate of cure will slow down considerably and at higher temperatures the working life of the mixed composition will shorten.

APPLIED AS A CEMENT PAINT, CEMENT PRIMER OR CEMENT FILLER:

Hydro Static Epoxy 400 can be used to repair damaged or worn concrete or as a priming base for laying concrete over old slabs and as one of the priming coats when preparing swimming pools for waterproofing.

- Mix 33% cement, 33% epoxy Part A and 33% Part B. For an increase in solids, increase the amount of cement that is added. The addition of cement tends to slow the curing time of the epoxy system.

As with all water based coatings, it is inadvisable to use **Hydro Static Epoxy 400** under conditions of low temperature or high humidity.

Chemical Resistance Testing:

Results have been found to be comparable to solvent based systems with the exception of caustic which is slightly inferior. Room temperature immersion tests little or no effect as follows:

1 Month:

10% Acetic Acid, Keytones, Glycol Ethers.

2 Months:

10% Sulfuric Acid, Aviation Hydraulic Oil, Petroleum Spirit.

3 Months:

Sea water, Distilled water, 10% Caustic Soda, Anti Freeze, Xylene, Acrylic and PVA latexes, phthalate palsticisers, teepol, crude oil, vegetable oils and rubber.

OVERCOAT:

Depending on the weather - 2 hours.

CLEAN UP:

Clean brushes and roller sleeves using soapy water.

Do not leave soiled brushes in water, the product cures in water.

PACKAGING:

20 litre, 10 litre, 4 litre and 2 litre, 1 litre kit.

HAZARD & FIRST AID:

Refer to the Material Safety Data Sheet.

SHELF LIFE: 18 months stored above 5 degrees C and below 20 degrees C.

AMI PRIMER / SEALER RANGE:

GP Primer – Wet area latex based primer for internal waterproofing priming over concrete and many other substrates.

GPS & Screed Block – Latex systems for use in screed waterproofing, concrete and general waterproofing

Sealpoxy – Waterbased, two-pack epoxy suitable for waterproofing, priming and sealing. Use Sealpoxy to avoid adhesion failure.

SB Primer: Solvent based single pack primer for use with polyurethane membranes.

Hydro Static Epoxy 400 – High quality, two-pack, waterbased epoxy for use in all areas of waterproofing and general priming.

AUSTRALIAN MEMBRANE INDUSTRIES PTY LTD

PO Box 242
GLENORIE
NSW 2157
Australia

Phone: 1800 099 990
Fax: +61 2 9652 0411
Email: info@amimembraneindustries.com.au
Web: www.amimembraneindustries.com.au