

HYCHEM E500P

Epoxy concrete primer

DATA SHEET



HYCHEM
EPOXY SYSTEMS

HYCHEM E500P is a low viscosity, high solids epoxy primer designed to penetrate, bond to and seal concrete surfaces.

USE

HYCHEM E500P is designed as a pore filling primer to be used in conjunction with high build epoxy coatings and toppings to inhibit gassing of the high build product due to thermal movement of air between the substrate and the air space.

This pore filling action is essential when the surface is to be coated with,

1. Any of the Hychem self levelling epoxy toppings
2. The Hychem TL2, TL5, TL5 EPL, TL9 & TL9 GF high build epoxy tank linings

TYPICAL APPLICATIONS

- As a primer for high build coating applications
- As a primer for self levelling floor toppings
- As a sealer for cementitious floor toppings
- As a binder for subfill and releveling of floors
- As a binder for patching concrete floors

FEATURES AND BENEFITS

- Excellent adhesion to concrete and most building materials and compatible to other coating or topping systems
- Versatile – suitable for general purpose use
- Low / no odour
- Non-flammable – no fire hazard
- Cost effective

PHYSICAL PROPERTIES (@ 25°C, 50% RH)

Viscosity	500 – 1000 cps
Specific gravity	1.08 kg/l
Solids content	>96%
Pot life	30 mins
Mix ratio by volume (Resin:Hardener)	1:1
Tack free time	8 hours
Recoat time	8 - 24 hours maximum
Cure time	8 - 12 hours for foot traffic
Application temperature until cured	Minimum 10°C - 30°C Maximum
Compressive strength (7:1 mortar by weight)	75 MPa

APPLICATION GUIDELINES

Surface preparation

- The concrete substrate must be firm, clean and dry with a compressive strength of 25 MPa and a minimum surface tensile strength of 1.5 MPa.
- New concrete must be allowed to cure for a minimum of 28 days.
- Remove all surface laitance, contaminants, existing coatings, curing compounds and any weak and loose materials.
- Prepare the concrete surface by Abrasive Grit Blasting, Shot Blasting, Scarifying, Ultra High Pressure Water Jetting or Scabbling to provide the appropriate surface profile for optimum mechanical keying.
- The extent of surface preparation required is dependant upon but not limited to the thickness of the coating system to be applied. It is highly recommended surface preparation is carried out in accordance with industry standards and publications such as NACE 02203 item No. 22420 or ICRI Technical Guideline No. 03732.

Applying

- Apply HYCHEM E500P by roller at a coverage rate of 4 - 8 sqm per litre depending on surface porosity.
- Allow the primer to cure completely before applying any subsequent coatings.
- For substrates of high porosity a second coat of primer may be necessary. Apply this second coat after a minimum time of 8 hours and a maximum time of 24 hours.

CLEAN UP

Xylene or MEK can be used for cleaning tools and equipment before the mixed compound begins to harden.

COVERAGE

Primer @ 4 - 8 sqm per litre depending on the porosity and texture of the surface.

WARNING - ENVIRONMENTAL CONDITIONS

Temperature and the surrounding atmospheric conditions will play a part in the curing process of all epoxy products. Under conditions of low temperatures and high humidity the final cured surface finish can be adversely affected potentially resulting in poor gloss retention, discolouration over time, poor overcoatability and intercoat adhesion. Quite often these conditions will result in the formation of a white film over the surface often evident after contact with water. This chemical reaction with the atmosphere is commonly referred to as "amine bloom" or "amine blush".

If this occurs then the existing coating will need to be abraded to completely remove the affected surface to ensure the adhesion of subsequent applications. In some cases partial or complete re-priming may be necessary.

To minimise an unsatisfactory cure the following indicative application conditions should be observed with respect to temperature and humidity levels.

21° C and less than 85% humidity

10° C and less than 75% humidity

Attention also needs to be paid to the substrate temperature which should be at least 3-5° C above the dew point during the curing phase.

Industry standards recommend the accurate recording of environmental conditions such as substrate & air temperatures, humidity levels and dew point readings during both the application & curing processes.

If in doubt consult the Hychem technical department for advice.

Field Support

Field support where provided, does not constitute supervisory responsibility. Suggestions made by HYCHEM either verbally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they and not HYCHEM are responsible for carrying out procedures appropriate to a specific application.

Customer Responsibility

The technical information and application advice given in this publication is based on the best information available at the time of print. As the information herein is of a general nature, no assumption can be made as to the product suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by Commonwealth or State Legislation. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use.

CHEMICAL RESISTANCE

Different epoxy products vary in their resistance to chemicals. Always ensure that the correct product is chosen for the service environment to be encountered.

If in doubt contact your Hychem representative or the Hychem technical department for advice. Chemical spillage of acids and sanitizing agents may attack the pigments used in the coating and result in discolouration.

PACKAGING

Kit size	Component A (Resin)	Component B (Hardener)
8 Litre	4 Litre	4 Litre
40 Litre	20 Litre	20 Litre
400 Litre	200 Litre	200 Litre

SHELF LIFE

12 months from date of manufacture, stored under shelter at 25°C in the original un-opened container.

SAFETY PRECAUTIONS

- Wear gloves, eye protection, mask and overalls during mixing and application.
- Ensure there is adequate ventilation and avoid breathing the vapour.