

HYCHEM E500P

Epoxy concrete primer

DATA SHEET



HYCHEM

INFRASTRUCTURE SOLUTIONS

HYCHEM E500P is a low viscosity, solventless, 100% solids epoxy primer.

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. HYCHEM SL 20 self levelling epoxy topping
2. HYCHEM TL2, TL5, TL6 and TL7 high build epoxy tank linings.

TYPICAL APPLICATIONS

- Primer for high build coating applications
- Primer for self levelling floor toppings
- Sealer for cementitious floor toppings
- Binder for subfill and releveling of floors
- Binder for patching concrete floors

FEATURES AND BENEFITS

- Excellent adhesion to concrete and most building materials and compatible to all other coating or topping systems.
- Versatile – suitable for all general purpose use
- Cost effective

PHYSICAL PROPERTIES (@ 25°C, 50% RH)

Viscosity	500 - 1000 cps
Specific gravity	1.10 kg/lt
Solids content	100%
Pot life	30 mins
Mix ratio by volume (Resin:Hardener)	3:1
Tack free time	6 hours
Cure time	12 hours - foot traffic
Compressive strength (7:1 mortar by wt)	75 MPa

APPLICATION GUIDELINES

Surface preparation

- Concrete substrate shall be firm, clean and dry with a compressive strength of 25 MPa and surface tensile strength of 1.5 MPa minimum.
- New concrete must be allowed to cure for a minimum of 28 days.
- Repair imperfections (holes and cracks) with an epoxy patching compound such as HYCHEM E500T when necessary.
- Remove surface laitance, contaminants, coating, curing compound and all weak and loose materials.
- Prepare concrete surface by Water Blasting, Diamond Grinding, Scarifying or Captive Shot Blasting to provide the appropriate surface profile for optimum mechanical keying.

Pre-conditioning product

It is important to note that even when the application environment is warm, products which have been stored in cold or cooler conditions should always be pre-conditioned ideally to 20-25°C to ease mixing, application and help avoid other potential issues such as amine bloom or blushing.

Applying a cold product in a warm environment is not recommended.

Applying

- Apply HYCHEM E500P by roller at a coverage rate of 4-8 sqm/litre depending on surface porosity.
- Allow the primer to cure completely before applying a subsequent coating.
- 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 72 hours.

CLEAN UP

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

COVERAGE

Primer – 6 to 8 sqm/litre depending on the porosity and texture of the surface.

PACKAGING

Kit size	Component A (Resin)	Component B (Hardener)
4 Lt	3 Lt	1 Lt
16 Lt	12 Lt	4 Lt
80 Lt	60 Lt	20 Lt

SHELF LIFE

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

SAFETY PRECAUTIONS

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

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.

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

Industry standards recommend the accurate recording of times and dates, batch numbers, consumption rates and environmental conditions including substrate and air temperatures, humidity levels and dew point readings during both the application and curing processes. Full material warranties cannot be provided unless all the relevant data has been recorded accurately.

If in doubt consult the Hychem technical department for advice.

NOTE: Customer responsibility

The technical information and application advice given here 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 products 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.

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.

If unsure contact Hychem for further technical advice before proceeding.