

HYCHEM E100

Epoxy primer for damp/green concrete

Product Description

E100 is generally used to prime concrete surfaces prior to the application of the main coating products or systems. Areas to be coated with epoxy topcoats, membranes and joint sealants can be treated with E100. E100 can also be used to prime for application of polyurethane and polyurea coatings as well as sealing concrete prior to vinyl, parquetry and carpet laying. It has good penetration into the substrate with moderate curing times. Hychem E100 is a solvent based, two-component epoxy primer.

Typical Applications

- Motor workshops
- Aircraft hangars
- Warehouses
- Back of house areas
- Stock and plant rooms

Features & Benefits

- Good penetration
- May be diluted
- Good curing properties
- Suitable for a range of applications and coatings

APPLICATION GUIDELINES

Application

E100 is usually applied by roller.

Apply 1 coat at approximately 6–8m² per litre.

Temperature and the surrounding atmosphere play a part in the curing process of epoxy coatings. Under conditions of lower temperatures and higher humidity the final finish can be adversely affected resulting in low gloss or in more severe instances a white film over the surface after contact with water. Adhesion can also be affected. 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.

Approximate application data for 23°C and 75% relative humidity.

Mix ratio by volume (Resin: Hardener)	1:1
Pot life	20 minutes
Tack free time	6 hours
Recoat time	6-24 hours

Surface preparation

- Concrete substrate shall be firm, clean and dry with a compressive strength of 25 MPa and surface tensile strength of 1.5MPa 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 GP where necessary.
- Remove surface laitance, contaminants, coating, curing compound and all weak and loose materials.
- Prepare concrete surface by water blasting or diamond grinding to provide the appropriate surface profile for optimum mechanical keying.

Mixing

- Mix with a jiffy mixer at a speed of 500rpm to avoid incorporating excessive air into the mix.
- Mix for 1 minute, scrape down the sides of the mixing container and mix for another minute to ensure the mix is homogeneous.

Packaging

8 Litre	This kit will cover approximately 50m ²
40 Litre	This kit will cover approximately 250m ²

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Environmental Conditions

Temperature and the surrounding atmospheric conditions will play a part in the curing process of all resin products. Under conditions of low temperatures and high humidity the final cured surface finish can be adversely affected, potentially resulting in poor gloss retention, discoloration over time, poor overcoat ability and inter-coat adhesion. Quite often these conditions will result in the formation of a white film over the surface, often evident after contact with water. If this occurs, 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 3-5 °C above the dew point during the curing phase. Industry standards recommend the accurate recording of environmental conditions such as 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.

Safety Precautions

Wear appropriate personal protection equipment. Gloves, eye protection, mask and overalls should be used during mixing and application. Ensure there is adequate ventilation and avoid breathing the vapour. Refer to the Safety Data Sheet for this product before use.

Shelf Life

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

Chemical Resistance

Acids	Alkalis	Solvents	Oils	Mechanical Fluids
Hydrochloric 10%	Ammonium Hydroxide 20%	Toluene	Crude	Skydrol
Nitric 10%	Sodium Hydroxide 20%	Turpentine	Mineral	Brake Fluid
Sulphuric 10%	Potassium Hydroxide 20%	Xylene	Engine	Petrol
Phosphoric 10%	Bleach	White Spirit	Vegetable	Antifreeze

Warranties and Disclaimers

HYCHEM warrants that this product shall conform to the technical specifications published in the product literature. The quality and fitness of the product is dependent upon the proper use and application of the product by the applicator. HYCHEM has no role in the application of the finished polymer other than to manufacture and supply its components. It is vital that the person applying this product understands the product and is fully trained and certified in the use of the application tools, including trowelling, spray equipment etc. There are no warranties that extend beyond the description on the face of this instrument, except when provided in writing, directly by HYCHEM.

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.

Legal Notes

The information, and in particular the recommendations relating to the application and end-use of HYCHEM products, are given in good faith based on HYCHEM's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with HYCHEM's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this

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information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. HYCHEM reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

EDITION: TDS HYCHEM E100_20110516