

Epo Shield 100 Rapid

Clear or coloured, solvent free rapid curing epoxy binder & sealer

DESCRIPTION

Epo Shield 100 Rapid is a two component, solvent free epoxy binder system, designed as a patching agent or primer for the Epo Shield 108 and Epo Shield SL systems. Epo Shield 100 Rapid can also be used as a finishing coat when combined with Epo Shield 108 Hardener. (Refer to Epo Shield 108 Data Sheet). Epo Shield 100 Rapid is available in clear or colour (colour achieved with colour packs added, 1 x 500mls per 6.17ltr of Epo Shield 100 Resin). Contact manufacturer for further information. Epo Shield 100 Rapid is fast curing and allows for fast re-coat times.

PRODUCT FEATURES & BENEFITS

- Non-flammable
- 100% solids epoxy provides a 400 micron DFT (two coat application)
- Good chemical and abrasive resistance
- Excellent adhesion qualities
- Negligible odour, can be used in built up areas without effecting surrounding businesses
- Extremely good wear resistance.
- Accelerated cure times, can be re-coated after 2 hours @ 25 degrees.
- Can be coloured with a wide range of colours
- Can be applied to meet an R10 - R13 finish with the addition of selected aggregates.

TYPICAL APPLICATIONS

- As a high performance new or maintenance coating
- As an abrasion and chemical resistant floor coating
- As a primer or patching mortar
- As a low odour, hard wearing, abrasion and chemical resistant floor coating

VOC RATING

TESTED UNDER THE REQUIREMENTS OF:

IEQ 13 VOLATILE ORGANIC COMPOUNDS "GREEN STAR TECHNICAL MANUAL".

TVOC's calculated as the sum total of the VOC's of each individual raw material component.

The total VOC is Clear, White or Colour 79.56 grams/ litre of ready to use product.

APPLICATION RATES

Primer	6 - 8m ² /litre/coat
Industrial floor finish	4 - 5m ² /litre/coat

PACK SIZES

Epo Shield 100 Rapid is available in 28.50ltr and 9.50 ltr containers.

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PERFORMANCE PROPERTIES

APPEARANCE	FREE FLOWING LIQUID
COLOUR	CLEAR OR COLOURED
FINISH	GLOSS
VOLUME SOLIDS	100%
WEIGHT SOLIDS	100%
SPECIFIC GRAVITY	APPROX 1.05 @ 25°C
RE-COAT TIME	2-3 HOURS AT 25°C/50%RH
POT LIFE	APPROX 15 MINUTES @ 25°C
VISCOSITY	APPROX 1000cps
FULL CURE	7 DAYS @ 25°C/50%RH
MIXING RATIO	2:1 BY VOLUME

PREPARATION

- All surfaces to be coated must be structurally sound with a minimum comprehensive strength of 25 MPa
- The concrete substrate shall be free of all contaminants including dirt, grease, oil, all previous coatings, adhesives, efflorescence, laitance. Ensure all loose material is removed and repaired
- Prepare the concrete surface by shot blasting or mechanical grinding to ensure the surface is adequately keyed prior to application of Epo Shield 100 Rapid
- All newly placed concrete must be allowed to cure for a minimum of 28 days
- All holes, non-structural cracks and surface deformities should be repaired prior to the application of Epo Shield 100 Rapid.
- Ensure re-coat times are adhered to between applications, a minimum of 2 -3hours is required between coats at temperatures of 25°C.

MIXING

1. Mixing should be by means of mechanical forced action mixer with a high speed shear stirrer.
2. First pre-mix each individual component to form a homogeneous paste, add the colour pack/packs to Part A and mix for 3-5 minutes if required.
3. Join the two components together by adding 2 Parts, Part A to 1 Part, Part B, mixing thoroughly for a minimum of 2-3 minutes until a homogeneous paste is obtained.
4. Avoid trapping air during the mixing process as this may cause pin holing in the coating during application.
5. Only mix as much product as can be used within the pot life of the product.

Note: Ensure the mixture is mixed correctly, there should be no colour streaking, then scrape the sides of the mixing vessel to ensure there is no unmixed material. It is ideal to store the product at 20-25°C to help avoid problems such as amine bloom or blushing. It is not recommended to apply a cold product in a warm environment.

PLACING

1. Apply in a uniform manner using a brush, roller or squeegee, ensure application rates are adhered to and ensure all surface voids are filled.
2. Avoid pin holing.
3. Allow to cure for a minimum of 2-3 hours and a maximum of 24 hours between coats
4. Successive coats should be applied at right angles to the previous coats.
5. When Epo Shield 100 Rapid is used as a finished coating, a minimum of two coats must be applied.
6. It is recommended during application that the coating depth be tested at random points with a wet film gauge/comb.

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PLACING (continued)

6. Where an anti-slip surface is required, broadcast appropriate aggregate on to the first coat while it is still tacky, allow to cure for a minimum of 2-3 hours.
7. Once cured, remove excess broadcast material using a broom or industrial strength vacuum.
8. Apply the second coat at right angles to the first.
9. Allow the surface to cure for a minimum of 8 hours before subjecting to pedestrian traffic, allow 24 hours before allowing vehicular traffic or chemical cleaning.
10. Full cure in 7 days.
11. Slip resistance is dependent on the size of the aggregate used.

R10 - 80 mesh	R11 - 60 mesh
R12 - 36 mesh	R13 - 24 mesh

CLEAN UP

Wash all equipment with xylene immediately on completion of application and mixing.

PRECAUTIONS

- Some individuals may experience a skin reaction to Epo Shield 100 Rapid. Use appropriate protection equipment. Refer to our Material Safety Data Sheet for further information.
- Do not apply to steel or metal surfaces as corrosion may occur.
- In enclosed areas ventilation should be provided during the coatings curing cycle to allow for adequate evaporation of the coating.
- Epo Shield 100 Rapid will yellow and/or chalk when exposed to UV light.
- Discard all material that has exceeded the products recommended pot life or working times.
- Epo Shield 100 Rapid is a coating, not a water proofing membrane.
- Apply Epo Shield 100 Rapid between 10°C - 35°C. Do not apply above 75% humidity.

Contact the manufacturer if one or more of the following conditions exist:

- The substrate is subject to hydro static pressure or rising damp.
- The substrate is chalky or dusting.
- Ambient or substrate temperatures are below 10°C.
- The finished floor will be subject to chemical attack (including hot chicken fats).

APPLICATION TO COLD SUBSTRATES OR DURING COLD CLIMATES

- Epo Shield 100 Rapid cure rates are dramatically reduced when applying to a substrate surface or ambient air temperature below 10°C.
- Applying Epo Shield 100 Rapid to cold substrates or during cold climates can cause amine blush, resulting in an oily residue and/or areas of uncured tacky discolouration.
- If the above occurs or any other surface contamination or discolouration appears on the coating, the Epo Shield 100 Rapid should be allowed to cure and then washed with fresh clean water, methylated spirits or xylene depending on the severity of the amine blush.
- Ensure total removal of all contamination prior to the application of any further product.
- Any failure to follow the above procedure will result in delamination between coats.
- Strictly follow all mixing instructions
- Always provide adequate ventilation during the curing cycle.

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STORAGE

- Keep Epo Shield 100 Rapid stored in a dry area, away from direct sunlight & frost.
- Store between 10°C & 30°C.
- Epo Shield 100 Rapid has a shelf life of 12 months in an unopened container.
- Ensure partly used drums are correctly sealed.

FIRE

Product is non-flammable and poses no fire risk.

SAFETY PRECAUTIONS

- Wear appropriate protective equipment, including clothing, gloves, appropriate respiratory mask and goggles.
- If poisoning occurs, contact doctor or Poisons Information Centre.
- If contact with skin occurs, remove contaminated clothing and thoroughly wash skin.
- If swallowed do not induce vomiting, give a glass of water.
- If in eyes, hold eyes open and flood with water for at least 15 minutes then see doctor immediately.
- For further information refer to the relevant Material Safety Data Sheet.

WARRANTIES

CONPELL offers warranties when their systems are applied by accredited applicators. Please contact manufacturer for further information.

IMPORTANT INFORMATION

The information and recommendations relating to Epo Shield 100 Rapid are given based on current knowledge and experience. Due to variances in material substrates and site conditions no warranties implied by law or, fit to purpose of the product can be implied. We accept no responsibility for loss or injury due to the incorrect handling or improper use of the product, limiting the cost of our liability to the replacement product cost only. Always refer to current Product Technical Data Sheets.

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