

Epo Shield 100 Rapid

Clear solventless rapid curing epoxy binder & primer system

DESCRIPTION

Epo Shield 100 Rapid is a two component, solventless epoxy binder and primer system, designed for use as a rapid curing general purpose floor patching binder, coving mix binder or primer for the Epo Shield 100, Epo Shield 108 and Epo Shield 100SL flooring systems.

Epo Shield 100 Rapid can also be used as a finishing coat when added at a ratio of 50/50 with Epo Shield 108 hardener, prior to mixing with the Epo Shield 100 Resin. The Epo Shield 100 Rapid system is available in clear or colour (colour achieved with colour packs added, 1 x 500mls per 9.50 litres of mixed Epo Shield 100 Rapid). 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
- Good chemical and abrasive resistance
- Excellent adhesion qualities
- Negligible odour
- Adheres to most substrates including masonry and compressed fibre board.
- Accelerated cure times
- Can be coloured

TYPICAL APPLICATIONS

- As a fast cure floor primer, concrete repair or coving binder
- As a high performance new or maintenance coating
- As an abrasion and chemical resistant floor coating
- Ideal where a quick return to service floor is required
- As a low odour, hard wearing, abrasion and chemical resistant floor coating

VOC RATING

TVOC's calculated as the sum total of the VOC's of each individual raw material component. The total VOC in Clear, White or Colour is **79.56 grams/ litre** of ready to use product.

APPLICATION RATES

Primer	6 - 8m ² /litre/coat
Industrial floor finish	3 - 5m ² /litre/coat

PACK SIZES

Epo Shield 100 Rapid is available in 57.00, 28.50 and 9.50 litre containers.

Epo Shield 100 Rapid

Clear solventless rapid curing epoxy binder & primer system

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	2-4 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

SURFACE PREPARATION

- All surfaces to be coated must be structurally sound and free of all previous coatings, adhesives, efflorescence or laitance by abrasive blasting, mechanical grinding or scarifying.
- The concrete substrate must be cure for a minimum of 28 days.
- The surface to be coated must have a minimum comprehensive strength of 25 MPa and a surface tensile strength of 1.5MPa.
- All surfaces to be coated must be free of all dirt, grease, oil or other surface contaminants.
- All holes, 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- 4 hours is required between coats at temperatures above 25°C.

MIXING

1. Only mix enough product that can be applied with the working time of the product. (The working time will be affected by the temperature).
2. Mixing should be by means of mechanical forced action mixer at a speed of 500rpm.
3. First pre-mix each individual component to form a homogeneous paste.
4. If required add colour pack/s to the Resin and mix until a homogeneous paste is achieved, a minimum of 1 minute.
5. 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.
6. Avoid trapping air during the mixing process as this may cause pin holing in the coating during application.
7. Ensure to move the mixing paddle around the outside of the container to ensure there is no unmixed product.
8. The unmixed containers should be kept at 20°C - 25°C prior to starting the mixing process, overly hot or cold product may affect the working time of the product or cause issues to the finished surface such as amine bloom or blushing.

PLACING

1. If used as a primer, apply using a squeegee and a medium nap roller at a coverage rate of 6 - 8 m²/litre depending on the substrate. Allow to cure for 2 - 4 hours but no longer than 24 hours.
2. If a coloured roll coat is required add Epo Shield 100 Rapid to Epo Shield 108 Hardener at a ratio of 50/50 prior to the addition of the Epo Shield 100 Resin.
3. Apply the first coat of Epo Shield 10 Rapid/108 using a squeegee and medium nap roller at a coverage rate of 3- 5 m²/litre then broadcast the required anti-slip aggregate in an even manner onto the surface while the surface is still wet and allow to cure for 2 -4 hours. During this process spiked shoes are recommended.
4. Once sufficiently cured remove excess material using a broom or industrial strength vacuum.
5. Apply a second coat of Epo Shield 100 Rapid/108 using a squeegee and a medium nap roller at a coverage rate of 3- 5 m²/litre. Allow to cure for a minimum of 12 hours before subjecting to pedestrian traffic and 24 hours before allowing use by vehicular traffic or any chemical cleaning.

Epo Shield 100 Rapid

Clear solventless rapid curing epoxy binder & primer system

PLACING (continued)

6. Full cure in 72 hours.
7. It is recommended during application that the coating depth be tested at random points with a wet film gauge/comb.

AGGREGATE SIZE

CA100	- R10
CA60	- R11
CONPELL 600, CA36	- R12
CONPELL 800, CA24	- R13

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.
- Do not apply Epo Shield 100 Rapid over any existing coating or concrete treatment such as curing compound or release agents. All contaminants must be removed prior to the application of Epo Shield 100 Rapid.
- 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.
- Allow mixed product to sit for five minutes to assist in accelerating the drying reaction.
- Do not apply thin coats as rapid moisture loss will arrest or slow the drying reaction.
- Always provide adequate ventilation during the curing cycle.

Epo Shield 100 Rapid

Clear solventless rapid curing epoxy binder & primer system.

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.

CONPELL

Head Office: PO Box 4252
Loganholme DC, Qld 4129

Ph: 1300 966 118

Brisbane Sales: 0450 040 848

National Sales: 0433 400 220

Email: info@conpell.com Web: www.conpell.com