

Epo Shield SL

Commercial grade self-smoothing solvent free epoxy resin system (2-5mm thickness)

DESCRIPTION

Epo Shield SL is a self-smoothing epoxy screed supplied as a 3 part system for on site application. Epo Shield SL is designed for use in a number of industrial, commercial and retail situations where a long lasting, easy to clean chemical and abrasive resistant floor is required.

This system delivers a hard wearing, extremely hygienic, chemically resistant coloured floor which is durable and easy to clean.

PRODUCT FEATURES & BENEFITS

- Non-flammable
- 100% solids epoxy
- Good chemical and abrasive resistance
- Produces a high build industrial wear coating
- Excellent adhesion qualities
- Negligible odour
- Can be applied from 2 - 4mm
- Provides a high gloss finish
- When correctly mixed, self-smoothing
- Coloured, available in a wide variety of colours

TYPICAL APPLICATIONS

- As a high performance new or maintenance coating.
- As a low odour, hard wearing and abrasion and chemical resistant floor coating.
- Ideal for use in hospitals, prisons, film studios, industrial facilities, food processing, retail shops, laboratories, or anywhere a high build durable and wear resistant floor is required.

Epo Shield SL shows excellent resistance to chemical attack, it is extremely important that all spills be cleaned up quickly to avoid unnecessary damage to the finished floor.

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

The total VOC is	White or Colour	79.61 grams/ litre of ready to use product.
	Clear	79.61 grams/ litre of ready to use product

APPLICATION RATES

A 16ltr kit of mixed resin will cover approximately 16m² @ 1mm thick.

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PACK SIZES

Epo Shield 100 is available in 28.50ltr and 9.50ltr containers. CONPELL Epo filler is available in 25kg bags.

PERFORMANCE PROPERTIES

APPEARANCE	FREE FLOWING LIQUID
COLOUR	COLOURED
FINISH	GLOSS
VOLUME SOLIDS	100%
WEIGHT SOLIDS	100%
Cure Times	
FOOT TRAFFIC	24 HOURS @25°C/50%RH
VEHICULAR TRAFFIC	72 HOURS @25°C/50%RH
FULL CURE	7 DAYS @ 25°C/50%RH
MIXING RATIO	EPOXY 2:1 BY VOLUME

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 surface must be cured for a minimum of 28 days.
- The surface to be coated must have a minimum comprehensive strength of 25MPa 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, non-structural cracks and surface deformities should be repaired prior to the application of Epo Shield SL.
- Ensure recoat times are adhered to between applications, a minimum of 12 hours is required between coats at temperatures above 25°C.

APPLICATION OF PRIMER

- Always apply primer before the application of Epo Shield SL.
- Apply 1 – 2 coats of Epo Shield TF100 or 100 Rapid using a brush and roller and allow to cure.
- The concrete substrate must be completely sealed before applying Epo Shield SL.

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.
3. Mix part A RESIN thoroughly with the colour pack(s) required.
4. Join the two components together, adding 2 parts, Part A RESIN with 1 part, Part B HARDENER by volume, mixing thoroughly for a minimum of 5 minutes until a homogeneous paste is obtained.
5. Add Part C, EPO FILLER at the rate of 1.2kg of Epo Filler to 1 litre of mixed epoxy, mixing for a further 3 minutes ensuring that the combined components are well blended.
6. Avoid trapping air during the mixing process as this may cause pin holing in the coating during application.
7. 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.

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PLACING

1. Pour the mixed material on to the primed floor, apply in a uniform manner, evenly spreading the material using a notched trowel, pinned screed or notched blade.
2. Avoid pin holing.
3. Immediately spike roll to expel any air that may have been trapped during the mixing and placing.
4. It is recommended during application that the coating depth be tested at random points with a wet film gauge/comb.
5. Allow the surface to cure for a minimum of 72 hours before subjecting to pedestrian traffic, allow 7 days before allowing vehicular traffic or chemical cleaning.
6. Full cure in 7 days.

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 SL. 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 SL 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 SL is a coating, not a water proofing membrane.
- Do not apply Epo Shield SL 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 SL.
- Apply Epo Shield SL between 10°C - 35°C. or 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 SL cure rates are dramatically reduced when applying to a substrate surface or ambient air temperature below 10°C.
- Applying Epo Shield SL 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 SL 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.

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STORAGE

- Keep Epo Shield SL stored in a dry area, away from direct sunlight & frost.
- Store between 10°C & 30°C.
- Epo Shield SL 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 SL 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

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