



EmO Guard SL500

Heavy duty 2 - 5 mm thick, chemical and abrasion resistant self level epoxide urethane flooring with glossy finish.

Uses

EmO Guard SL 500 provides an extremely high strength glossy floor topping with exceptional resistance to attack from mechanical wear and chemical spillage. In addition to being impervious its use facilitates a safe non-slip finish for personnel and vehicular traffic, and is ideally suited for:

- Heavy engineering plants
- Electricity substations and battery rooms.
- Chemical handling and process areas.
- Oil refineries.
- Dairies and soft drink factories
- Educational institutions.
- Industrial plants

In areas where high degrees of cleanliness are required, EmO Guard SL 500 can be used.

Advantages

- Solvent Free – 100% Solids
- Colored Glossy Finish
- Easy Cleaning
- Long service life.
- Exceptional resistance to abrasion and a wide range of chemicals.
- Safe working environment, solvent free
- Good gripping surface to both vehicular and pedestrian traffic.
- Versatile application – food grade and other special versions available to match individual requirements.
- Hygienic – provides a dense, impervious, seamless floor surface which is easily cleaned

- Attractive – Can be made in a wide range of colors up on request to enhance the working environment

Standard compliance

Tested to variety of International standards ASTM C 109-90 for compressive strength, BS6319 for tensile and flexural strength and ASTM C 501 for abrasion resistance.

Product Description

EmO Guard SL 500 is a Three Component solvent free combination of epoxide urethane resin, modified amine hardner, filled with specially graded inert aggregates. It is supplied in pre-weighed units of three part (colour pack extra with certain special shades), which are ready for on-site mixing and application.

EmO Guard SL 500 is laid by notched trowel as a durable, chemically resistant flooring approximately > 2 mm thick.

Typical Properties

Complete cure :	@20°C	@30°C
	: 7days	5 days
Pot life	: 45min	30min
Initial hardness :	18 hrs	16 hrs
Compressive strength		
@25°C (7 days)	:	85N/mm ²

Flexural strength
 @25°C (7 days) : 28N/mm²
 Tensile Strength
 @25°C (7 days) : 16N/mm²

Bond strength to concrete : > cohesive

Strength of concrete

Application thickness : 2 to 5 mm

Indentation characteristics: No indentation

From a height of 2.4m

Chemical Resistance

EmO Guard SL 500 is resistant to spillages of the following when tested accordance with ASTM D 1308 Cl. 3.1.2.

Acids (m/v)

Hydrochloric acid 10% : Resistant
 Sulphuric acid 10% : Resistant
 Citric Acid 25% : Resistant
 Acetic Acid 10% : Resistant

Alkalis (m/v)

Sodium hydroxide 10% : Resistant
 Ammonia 35% : Resistant

Solvents & Organics

Petrol : Resistant
 Skydrol : Resistant
 Diesel : Resistant
 Brake fluid : Resistant

Engine oil : Resistant

Ethylene glycol : Resistant

Propylene glycol : Resistant

Kerosene : Resistant

Aqueous solutions

Sodium chloride (sat) : Resistant

Urea solution (Sat) : Resistant

Technical Support

ELMRR provides a comprehensive technical support service to specifiers, end users and contractors and is able to offer on-site technical assistance.

Directions for Use

Surface Preparation: Ensure the concrete foundation surface is dimensionally stable and free of dirt, dust, oil, laitance, paint, curing compounds etc. Bolt holes and fixing pockets should be free from any dirt or debris. If possible a roughened surface is preferable to smooth surfaces. Metal surfaces must be free from rust, loose scaling and paint. Shuttering should be covered with polyethylene to ensure a clean release.

New concrete floors

Should be at least 21 days old (at 20°C) with maximum moisture content not exceeding 5%. Laitance deposits on new concrete floors are best removed by light grit blasting, mechanical scrubbing or grinding.

Old concrete floors

Again, mechanical cleaning methods are strongly recommended on old concrete floors particularly where heavy contamination by oil and grease has occurred or existing coatings are present. These may well have been absorbed several millimeters in to the concrete. To ensure adhesion, all contamination should be removed. Proprietary chemical degreaser may be used on small areas of light contamination only.

Steel surfaces

Steel surfaces should be degreased and grit blasted to SA2^{1/2} immediately prior to application.

Priming

All surfaces should be primed with Solvent Free EmO Guard MP Primer designed for maximum absorption and adhesion to concrete substrates.

Add the entire content of the hardener tin to the base tin and mix the two primer components thoroughly for at least 2 minutes – under no circumstances should part mixing be considered.

Once mixed the primer should be applied immediately to the prepared substrate using stiff brushes or rollers. The primer should be Well-scrubbed in to the substrate to ensure full coverage, but care should be taken to avoid over application or ponding. Allow the primer to dry before proceeding to the next stage, do not proceed while whilst the primer is tacky as this will lead to unsightly marks in the finished surface. Porous substrate may require a second primer coat – when the first coat is directly absorbed in to the substrate –

but minimum over coating time must still be observed.

The over coating time will vary slightly according to the porosity of the substrate. However, they should be in accordance with the following ambient application temperatures.

20^oc : 6 – 24 hours

30^oc : 3 – 16 hours

40^oc : 2 – 10 hours

Mixing: Do not commence mixing until all surface preparation, cleaning and shuttering is complete. **EmO Guard SL 500** is supplied in pre-weighed units and do not split units during mixing. Add the Colour Pack to the base A Part in a suitable forced action mixer and stir for 2 to 5 min to this add B Part (Hardener) and continue mixing for 30 sec. Gradually empty the filler in to the mix of base and hardener and continue mechanical mixing for a further 2 – 3 minutes, until all components are thoroughly blended

Application

Ensure that the mixed EmO Guard SL 500 should be spread to uniform thickness on the primed surface using a notched trowel. Using a spiked roller, remove air entrainment and allow drying. Once mixed, the material must be used with in the specified pot life. After this time, any unused material will have stiffened and should be discarded.

Equipment care

Clean all equipment promptly using **ELMRR Epoxy Solvent**. Cured material will have to be mechanically removed.

Packaging & Storage

EmO Guard SL 500 is available in factory, pre-weighed units of 10 liter. It has a minimum shelf life of 12 months provided it is stored under cover, out of direct sunlight.

EmO Guard MP Primer - 5 liter pack

EmO Guard SL 500 - 10 liter pack

Coverage

1 m²/ 3 ltr @ 3 mm thickness

Health & Safety

Precautions

EmO Guard SL 500 does not fall into the hazard classifications of current regulations. However, it should not be swallowed or allowed to come into contact with skin and eyes. Suitable protective gloves and goggles should be worn. Splashes on the skin should be removed with water. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately – do not induce vomiting. For further information refer to the Material Safety Data Sheet available for this product.

Limitations

EmO Guard SL 500 should not be applied on to surfaces which are known to or likely to suffer from rising damp or have a relative humidity greater than 75% as measured in accordance with BS 8023 Appendix A or by Hammond concrete/mortar moisture tester type COCO. ELMRR does not recommend acid etching as a method of floor preparation. If

used, the method should be approved by the project consultant.

Please contact ELMRR technical department where application or service temperatures are outside the range of 5^oc to 40^oc

This Product is generally not suitable for external use

Important note

ELMRR endeavors to ensure that the technical information contained herein is true, accurate and represents our best knowledge and experience. No warranty is given or implied, as ELMRR has no control over the conditions of use and the competence of any labor involved in the application are beyond our control.

As all ELMRR technical data sheets are updated on a regular basis it is the customer's responsibility to check that the product is suitable for the intended application, and that the actual conditions of use are in accordance with those recommended.

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