



EmO Guard UV

UV resistant, two component aliphatic, polyurethane floor coating system.

Uses

Provides a high protection system, to a variety of surfaces exposed to aggressive environments. Typical areas of application would include the following:

- UV resistant top coat for external areas
- Floor coating application
- Underground protection in foundations etc.

Advantages

- Low cost in service – due to combination of excellent uv and good chemical resistance properties
- Labour saving – can be applied directly on to fully cured concrete without need for priming system
- UV stable – will not fade or deteriorate in strong sun light
- Excellent service life – resistant to chlorides and sulphate ions plus a wide range of chemical
- Durable finish – offers good abrasion resistance

Description

EmO Guard UV is a high quality, two component aliphatic polyurethane protective coating which can be applied to a variety of surfaces including steel, tiles, wood and concrete. It is supplied as a two pack material which on mixing gives a high gloss finish

EmO Guard UV is applied to a dry surface, as a single coat of between 200 – 300 microns wet film thickness. Additional coats may required for extreme exposure conditions.

Specification

Where shown on the contract documents, the final, corrosion resistant coating shall be EmO Guard UV, an aliphatic polyurethane, protective coating. The coating shall possess excellent UV resistance properties. It shall be compatible with concrete, steel and wood

Standards compliance

Resistant to a variety of organics and solvents (ASTM C 957) like petrol, diesel, skydrol, brake fluid, engine oils and kerosene. Comply with ASTM D 412 for pull off test.

Typical Properties

Specific gravity (20^oc) : 1.3g /cm³

Solid content by weight : 63 %

Solid contents by volume

(ASTM D2697) : 53 %

Surface drying time

(ASTM D 1640) : 6 hrs @ 20^oc

4 hrs @ 35^oc

Over coating time
 (ASTM D 1640) : 6 – 7 hours@ 20^oc
 3 – 4 hours@ 35^oc
 2 – 3 hours@ 45^oc

Complete cure : 7 days@ 25^oc

Water absorption
 (BS 1881 Pt.122) : Nil

Water permeability
 (DIN 1048 Pt.5) : Nil

Adhesion strength
 (ASTM D 4541) : 1.5 N/mm²

Chemical resistance

Acids (m/v)

Lactic acid 20% : excellent
 Acetic acid 20% : excellent
 Nitric acid 5% : excellent

Solvents & organics

Ethylene glycol 40% : excellent

Aqueous solutions

Copper sulphate 25% : excellent
 Zinc sulphate 25% : excellent
 Magnesium sulphate 25%: excellent
 Tap water : excellent
 Sea water : excellent
 Ground water : excellent

High sulphate water : excellent

Distilled water : excellent

Directions for Use

Surface preparation

All surfaces must be clean and free from laitance, dirt, dust, oil and grease. In case of porous substrates, spray liberal quantity of water on the substrate, prior to commencement of application.

Priming

Priming of any substrate should only be completed using EmO Guard MP. In certain instances, it is possible to apply EmO Guard UV directly on top of prepared existing substrates.

Most importantly, however, the priming coat should be completely dry before applying **EmO Guard UV Top Coats**.

Mixing

The contents of the resin base tin should be thoroughly stirred to disperse any possible settlement.

The entire content of the hardener should be poured in to the base container, and the two materials mixed thoroughly until both uniform colour and consistency are obtained.

It is recommended that the two components are mixed together mechanically; using a slow speed, electric drill, with a proprietary mixing paddle attachment. Mixing should be carried out continuously for 3 to 5 minutes. If aerated, allow to stand for 10 to 15 minutes before application.

Note:

EmO Guard UV should be mixed in an open, well-ventilated area. If subsequent application is to be in a confined or poorly ventilated space, then air-fed respirators must be worn.

Application

EmO Guard UV can be applied by brush, roller or spray to prepared surfaces. Stir well before use, replace lid when not in use. Soak up any spillage with EmO Guard EP solvent and wash down immediately.

Apply EmO Guard UV at the rate of 4 m² per litre, in two coats to give a minimum dry film thickness of 400 microns.

Vertical applications can be achieved by single coat application up to a maximum wft of 200 microns per coat. For multiple coat application, the second coat should be applied at right angles to the first within the stated over coating times. All applications should be continued up verticals to the existing damp proof course. Ensure that the coating is not damaged during subsequent applications.

Repairs

Any damaged areas can be readily over coated to restore the membrane continuity. The surface is to be properly prepared using emery cloth to rub down the surface to provide a key and is to be made dust free, prior to product application.

Cleaning

EmO Guard UV should be removed from tools and equipment with EmO Guard EP Solvent or

any aromatic hydrocarbon solvents. If left to dry then use a scourer

Limitations

- Application should not commence below 10⁰c or above 50⁰c
- Do not apply on running or standing water or when there are chances of rain

Estimating

Supply

EmO Guard UV : 5 Litre

EmO Guard MP : 5 Litre

Theoretical coverage

General use : 4 m² per litre @ 200 micron wft/coat (2 coat application recommended) (actual coverage rates will depend upon substrate porosity)

Storage

EmO Guard UV will have a minimum shelf life of 12 months if stored in normal warehouse conditions at less than 25⁰c

Health & Safety

Precautions

EmO Guard UV and **EmO Guard MP** 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.

Equipment care

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

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.

Manufactured By:

Elmrr Chemicals
(New Rusayl Heights)

FACTORY & H.O
P.O.BOX 176, PC 124,
Rusayl Industrial Area,
Sultanate of Oman
Tel: +968 24446914
Fax: +968 24446776

Email: sales@elmrr.com

www.elmrr.com