

# ERADUR® ESD RESISTENT LM3

Anti-static coating that resists aggressive solvents



Eradur® ESD Resistant LM3 is a chemical resistant epoxy coating with anti-static properties, ie the coating dissipates static electricity and counteracts sparking.

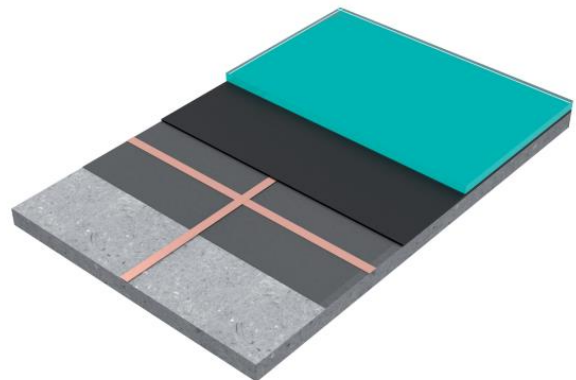
Eradur® ESD Resistant LM3 is formulated for continuous exposure to several chemicals, especially solvents and N-methyl-2-Pyrrolidone (NMP & NEP). The product provides industrial floors, protection basins, and embankments with permanent protection against long-term chemical attacks. The product is safe to use.

Eradur ESD Resistant LM3 is optimized for chemical resistance which means that the product turns yellow and darkens slightly more than conventional epoxy coatings. The coating should, therefore, be carried out in Black or Gray hues.

ESD approved according to IEC 61340-5-1

Eradur® ESD Resistant LM3 is adapted for use in:

- Electronics industry
- Chemical industry
- Hygiene and cleanroom environments
- Cellulose industry
- Pharmaceutical industry
- Server rooms
- Electronics room



## PROPERTIES ESD RESISTENT LM3

<b>Adhesion</b>	Very good adhesion to clean concrete as well other substrates.
<b>Compr. Strength</b>	Strengthens the concrete substrate and transfers loads.
<b>Abr. resistance</b>	Very good resistance against in tense rolling and abrasive traffic.
<b>Permeability</b>	The seamless coating is free from pores and impervious to liquids.
<b>Chemical resistance</b>	Excellent. Withstands continuous exposure to most chemicals. ESD Resistant LM3 has excellent resistance to most solvents, hydrocarbons, alcohols, esters and ketones. Copes with aggressive solvents such as chlorinated hydrocarbons, acetone and methanol without being affected. Good resistance to inorganic acids. For more information contact the seller

### Substrate and conditions

The concrete must be fully cured, RH max 93% and laitance removed by diamond grinding or blasting. The concrete surface should have a tensile strength exceeding 1.5 MPa and should be dry, dust-free and well cleaned. Asphalt and bitumen should be grinded or milled off. During application the surface temperature of the floor should exceed 12°C (54°F) and the relative humidity (RH) of the air 80%.

Small cavities and cracks in the substrate must be repaired with epoxy products, cement mortars are not used in thin layers.

The Eradur products in the coating system are two pack products and must be mixed thoroughly before application. The mixing proportions are important and therefore batch-packed material should not be parted. Pot-life is 30–60 minutes dependent on product and temperature. Base, hardener and filler material should be room temperature before use.

High relative humidity, or if the temperature drops below the dew-point during the first 24 hours after application, may rise to surface disturbances like a matt haze. This is only a surface effect and will not affect durability or chemical resistance.

### Coating Thickness

The coating is usually carried out in a layer thickness of 2 mm. At >4 mm layer thickness, a reinforcement of the concrete substrate is obtained against point loads.

### Slipresistance

The reference area should always be done and approved for the current activity

#### Eradur® ESD Resistent LM3, 2 mm (Structure – Anti-slip)

Primer: ERADUR® Primer N, alt. ERADUR® Plus Primer: 0,30 kg/m<sup>2</sup>.

Ground connection: Copper tape 15-25mm: 0,40 m/m<sup>2</sup>.

Anti-static layer: ERADUR® ESD Primer 1: 0,12 kg/m<sup>2</sup>.

Slurry: ERADUR® ESD Resistent LM3: 0,93 kg/m<sup>2</sup>

Filler: Silicon Carbide: 0,4-1,0 mm: 4,5 kg/m<sup>2</sup>.

Topcoat: ERADUR® ESD Resistent LM3: 0,75 kg/m<sup>2</sup>.

#### Eradur® ESD Resistent LM3, 2 mm (Smooth)

Primer: ERADUR® Primer N, alt. ERADUR® Plus Primer: 0,30 kg/m<sup>2</sup>.

Ground connection: Copper tape 15-25mm: 0,40 m/m<sup>2</sup>.

Anti-static layer: ERADUR® ESD Primer 1: 0,12 kg/m<sup>2</sup>.

Topcoat: ERADUR® ESD Resistent LM3: 2,30 kg/m<sup>2</sup>.

Please note: The coating has high technical requirements and can therefore leave something to be desired in terms of appearance.

### Swedish standard

Eradur® ESD Massiv SL has been tested according to CE EN 13813

ESD approved according to IEC 61340-5-1

These instructions and recommendations are given from our own experiences with the products. As the performance of the work is our control, our responsibilities are limited to the quality of the products. Our experience and knowledge on the products are naturally broader than could be described in this text. Please contact us for further information.

**Curing time** The curing time depends on the temperature. Normally, the floor can be loaded 24 hours after the last operation. Full cure is achieved after 5-10 days.

	12°C	20°C	30°C
<b>Light loads</b>	38 h	24 h	12 h
<b>Heavy loads</b>	72 h	36 h	24 h
<b>Full chemical resistance</b>	10 days	7 days	5 days

### System properties

**Appearance:** Blank, Slip resistance surface

**Compressive strength:** >80 MPa

**Tensile strength:** >23 MPa

**Flexural strength:** >25 MPa

**Hardness (Shore D)** ca 80

### Color

See color chart on our standard colors. Can also be performed in most RAL and NCS colors.

### Environment

A long working-life (10-25 years) and good function with tailor-made properties means that the coating is a long-term good environmental choice, with low costs of maintenance. See environmental declaration.

Seamless floors give dense surfaces and give rise to great hygienic and environmental advantages. The floor surface is easy to clean and the demand for chemicals for daily cleaning and maintenance, is reduced.

### Hygiene at worksite

ERADUR epoxy products are twopack formulations of thermosetting plastic, which mean that only trained personnel are allowed to handle the products. Areas, where work with isocyanath/epoxy is being performed, must be separated with signs and have a good ventilation. Other activities may not take place within the defined work area. Persons, having isocyanath-asthma or are allergic are not to be within the work-area. The cured coating is of no hazard from a health or environmental point of view. See environmental declaration.

Adherence to local regulations for work with reactive plastics is necessary, see [www.av.se](http://www.av.se) (AFS 2015:43).

### Maintenance

The coating is resistant to common used industrial cleaners and cleaning methods, including high-pressure cleaning.

See separate cleaning instructions.

After years of wear, reconditioning is possible with new surface top.

Eventually damaged or worn coatings are best repaired by authorized Eradur entrepreneurs.

### Guidance for projecting

Difficult environments often demand special pre-treatment or preparation. Eradur AB offers guidance and technical service for the right choice of coating in order to fulfil demands in different environments.

Experience and knowledge are needed for an adequate result and we work together with authorized Eradur entrepreneurs.

### General information

Contact Eradur AB for questions about the area of use, chemical resistance and application conditions.

### Description text, example

MHG Eradur® ESD Resistent LM3, Color: RAL 7035, thickness 2 mm. Coved skirting 100 mm, radius 50 mm, mass as the floor coating. Sveff's quality documentation must be followed. Supplier Eradur AB. Execution according to the supplier's instructions mass as the floor coating.