

# ERADUR® ESD STRUKTUR

Anti-static coating with slip-resistance and all-round properties.



Eradur® ESD Struktur is the anti-static version of Eradur® Struktur with otherwise equal properties.

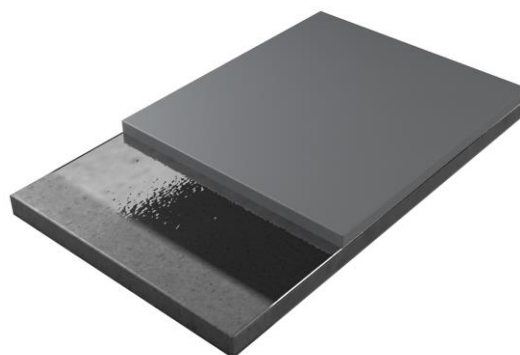
The coating counteracts and dissipates static electricity.

The Eradur® ESD Struktur is a coating for most industrial environments, both dry and wet. The slip-resistance can be customized for each floor area by choosing grain size and surface treatment. This type of coating has a long life and by using hard minerals such as silicon carbide, the coating can be made extra abrasion-resistant.

Eradur® ESD Struktur has high surface density and high abrasion resistance. It can be made as a single-color or with colored sand coating.

Eradur® ESD Struktur is adapted for use in:

- Electronics industry
- Chemical industry
- Production halls
- Warehouse



## PROPERTIES ESD STRUKTUR

Adhesion	Very good adhesion to clean concrete as well other substrates.
Compr. Strength	Strengthens the concrete substrate and transfers loads.
Abr. resistance	Very good resistance against intense rolling and abrasive traffic.
Permeability	The seamless coating is free from pores and impervious to liquids.
Chemical resistance	Resistant to the most common industrial chemicals, alkali and petroleum oils. See separate chemical resistance table

### 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 2-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 3-5 mm layer thickness. At > 4 mm layer thickness, the concrete substrate is strengthened against point loads. At very high point loads, the coating can be carried out to 6-8 mm to strengthen the concrete substrate even further.

### Slipresistance

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

### Eradur® ESD Struktur, 3mm

Primer: Eradur® Primer N, alt. Eradur® Plus Primer: 0,3 kg/m<sup>2</sup>.  
Sand: uncolored quartz sand 0,7-1,2mm: 0.5 kg/m<sup>2</sup>.  
Ground connection: Copper tape: 0,05-0,1 m/m<sup>2</sup>  
Anti-Static layer: Eradur® ESD Primer 1: 0,12 kg/m<sup>2</sup>.  
Slurry: ERADUR® Binder: 1,0 kg/m<sup>2</sup> + Graded ballast material, 2,5 kg/m<sup>2</sup>.  
Sand: colored ESD quartz sand #7: 3.0 kg/m<sup>2</sup>.  
Topcoat: ERADUR® ESD Topplack: 0,8 kg/m<sup>2</sup>.

### 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
Light loads	36 h	24 h	12 h
Heavy loads	72 h	36 h	24 h
Full chemical resistance	10 days	7 days	5 days

### Swedish standard

Eradur® Esd Struktur has been tested according to CE EN 13813

### System properties

Appearance:	Smooth surface with some surface texture
Compressive strength:	> 90 MPa
Tensile strength:	> 28 MPa
Flexural strength:	> 30 MPa
Hardness (Shore D)	ca 82

### Color

The choice of color for Eradur® ESD STRUKTUR is somewhat limited. Contact Eradur for color suggestions.

### 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 2-pack 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 STRUKTUR, Color Gray 10, thickness 4 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.
-----	---