

# EPOXY BASED CONDUCTIVE SELF LEVELING FLOOR COATING (ESD)

**Demmerg**<sup>®</sup>  
C H E M I C A L S

## DEMCO<sup>®</sup> EPOX 2100 SELF/ESD

### Description

DEMCO EPOX 2100 SELF/ESD is an epoxy-based antistatic floor coating material that does not contain solvent, can be spread by itself, has high mechanical and chemical resistance. It is used in the coating of floors where high mechanical strength and antistatic (semi-conductivity) is required, in laboratories related to the health sector, especially in the production of electrical and electronic parts and in test laboratories.

### Working Conditions

The temperature in the operation area should be in the range of 15 °C - 30 °C.

### Mixing

Component A is mixed in its own can. Then component B is poured into the can of component A during stirring, and they are mixed using a mixer till a homogenous mixture is obtained. Then, mixing continues and component C is added into the mixture slowly. They are mixed for 4 – 5 minutes. It is recommended that the mixer speed is low not to cause air bubbles in the mixture.

### Advantages

Has resistance to abrasion and friction.

Does not dust and easy to apply.

Hygienic. Easy to clean.

Provides of transferring static electricity to the bottom layer by conductors.

### Surface Preparation and Application Method

The application surfaces should be free from oil, rust, dust and similar impurities. There should not be moisture on the application surface, there should be no loose layer left. The shiny surface should be roughened with shot-blast, slim or freeze. The prepared concrete surface should be primed with Solvent Free Epoxy Impregnated Primer DEMCO EPOX 100 PR in a way to be impregnated by considering the application instructions. Cracks and holes on the surface, if any, should be repaired using epoxy putty. Solvent Free Epoxy Conductive Primer DEMCO EPOX 195 PR / CONDUCTIVE is applied with the flat side of the trowel after 8 - 10 hours on the prepared and primed surface. It is scanned with a roller when necessary. After 10- 12 hours, Epoxy-based, Conductive, Self Leveling Floor Coating (ESD) DEMCO EPOX 2100 SELF / ESD is applied on the surface by spreading with a trowel or squeegee. Air bubbles are removed with a spiked roller.

**ATTENTION!** Care should be taken that the conductors connected to the grounding line are completely covered under the epoxy conductive lining and the coil.

**ATTENTION!** It is designed for horizontal floors due to its very good spreading feature; It is not suitable for use on vertical surfaces as it will cause sagging.

### Consumption

For one layer, 1,500-2,000 kg/m<sup>2</sup> should be used.

### Thinner

Can not be thinned out with thinner.

### Package

Total : 20 kg (A: 11,00 kg / B: 4,40 kg / C: 4,60 kg)

### Storage and Shelf Life

It should be kept in its original, unopened package and in closed and dry places, which are at 15 – 25°C. It must not stay under direct sunlight. Under these conditions, the shelf life is 12 months.

### Technical Properties

Number of Components	3
Mixing Ratio (by weight)	A/B/C (55/22/23)
Mixing Density (g/cm <sup>3</sup> , 20°C) (TS EN ISO 2811-1)	1,50 ± 0,10
Pot Life (min., 23°C, 100 ml) (DIN 16945)	50 - 90
Curing Time (23°C) (TS 4317)	
Dry to Touch (Hours)	8 - 10
Fully Cured (Week)	1
Electrical Conductivity (100 V) (DIN EN 61340-4-1)	750 kΩ - 35 MΩ

### Mechanical Properties

Shore D (ASTM D 2240)	~ 70
Abrasion Resistance (mg) (Taber,CS17, 1 kg 1000 cycle)	~ 35 - 40

### Safety Measures

Product's skin contact must be avoided. In case of contact, skin must be washed with water. Eyes should be flushed with water and medical attention must be sought immediately. Wear suitable protective clothing, gloves and goggles. Keep away from children.

### Attention

The ideal temperature of the substrate to be applied should be 15 °C - 30 °C. The temperature should not be below 10 °C.

In applications performed in open and closed areas, the floor, ambient temperature and ambient humidity should be considered.

Floor relative humidity should be below 4% and ambient humidity should be below 80%.

It should not be touched for 24 hours after the application and it should not come into contact with water.

During the work, appropriate amount of mixtures should be prepared and work should be continued until all of this mixture is consumed.

The full curing time of DEMCO EPOX 1901 SELF CONDUCTIVE / C applied at 20- 25 °C is approximately 7 days at room temperature.

Conductive primer DEMCO EPOX 195 PR / CONDUCTIVE 250 g / m<sup>2</sup> + conductive self DEMCO EPOX 2100 SELF / ESD 3000 g / m<sup>2</sup> application is recommended in order to obtain a good conductive floor covering.

**LEGAL WARNING:** The above specifications are based on laboratory test results. It is recommended to consult Technical Service for special applications and the newly designed studies. Our company is not responsible for unsuitable conditions and studies which are not under our control.

### Approvals / Standards

☑ It has been tested according to EN 1504-2 under the scope of the certificate.

Demmerg Kimya San. ve Tic. A.Ş.

İstanbul Deri OSB Sırça Caddesi. No:6/A Tuzla – Türkiye

www.demmerg.com info@demmerg.com +90 216 504 64 14

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