

# EPISOL® FLOORLINE EL

ELECTRICALLY CONDUCTIVE EPOXY RESIN BASED FLOORING (TO 2 MM)



## DESCRIPTION

EPISOL® FLOORLINE EL is a self-leveling, 3 component, electrostatically conductive epoxy resin based flooring, suitable for industrial ATEX environments.

## ADVANTAGES

- Electrostatically conductive
- Limited layer thickness
- High wear resistance
- Mechanical strength
- Excellent flow
- High gloss
- High chemical resistance
- Easy to maintain
- Liquid tight
- Good UV resistance

## FIELD OF APPLICATION

EPISOL® FLOORLINE EL is an electrostatically conductive epoxy resin based flooring with high mechanical properties and high chemical resistance. Suitable for industrial ATEX environments

- Electrically conductive and electrostatic applications
- Areas subject to explosion hazard - ATEX
- Rooms with sensitive electronic equipment
- Computer rooms
- Electronic industry
- Pharmaceutical industry
- Nutrition and animal nutrition
- battery charging stations
- Automotive, space and aviation industry
- Storage for solvents
- etc...

## APPLICATION

**Note:** The following is a typical application description. In case of other jobsite parameters, please contact our technical department.

### PRELIMINARY ANALYSES

Before starting the substrate preparation and applying the products, it is important to test various parameters in order to achieve a good and sustainable result.

Compressive strength of the substrate: min. 25 N/mm<sup>2</sup>

Tensile strength of the substrate: min. 1,5 N/mm<sup>2</sup>

Moisture content in the substrate: ≤ 5% moisture.

Conditions during the application and curing: see "implementation conditions" further described in this technical data sheet.

Technically studied dilatation joints must be provided. These are resumed in the synthetic resin system to be installed.

The flatness of the surface must be consistent with the desired requirements. Should this not be the case, then correct measures have to be taken to fill in or smooth out the irregularities with products that are complementary to the substrate and to the coating to be installed. Shrink joints and passive cracks can be coated. This on condition that they are not used as dilatation joints or if they do not follow other movements of the structure and the substrate and that they are flattened with products that are complementary to the substrate and to the synthetic resin system to be installed.

### REQUIRED TOOLS

- Mixer with spindle (min. 300 rpm)
- Flat trowel Spiked roller Masking tape

### PREPARATION OF THE SUBSTRATE

Cracks, joints and other parts that show water leaks must first be made completely water-tight and leak-proof.

The surface must be mechanically pre-treated. This can be achieved by removing the dust by bullet- or sandblasting or by sanding the surface.

These treatments ensure that an open texture surface is obtained, to remove the cement skin from concrete and old remnants of coatings and adhesives. High pressure water jetting is possible but then the surface must dry sufficiently.

Moisture content in the substrate: ≤ 5% moisture. Before applying the primer:

Always apply the products on a clean surface, free from adhesion reducing materials such as dirt, oil, grease, old coatings or surface treatments, ...

The parts of the surfaces to be coated that do not meet the requirements as described above (compressive strength, tensile strength, parts that are not well connected, ...) must be treated or removed and repaired according to a correct method and with products that are complementary to the substrate and the synthetic resin system to be installed. Remove any loose parts by brushing properly and remove dust with an industrial vacuum cleaner.

Then apply a RESIPLAST NV epoxy primer and / or egaliser. If you choose to work with a seamless plinth, use RESIPOX® PRIMER with RESIPOX® epoxy repair and plinth mortar. After the previous steps have hardened, copper strips are glued in sections of 8 by 8 meters. Apply a minimum of two cross-shaped strips for small spaces. The copper strips are connected to an earth, one connection per 100 m<sup>2</sup>. Then apply EPISOL® PRIMER EL WB and let it cure.

### PREPARATION OF THE PRODUCT

#### Mixing

Stir the base (component A) homogeneously before use. Add the full amount of hardener (component B) and mix mechanically (300 rpm) until both components are homogeneous. Slowly add the filler component to the mixture. Mix until a homogeneous mass is obtained.

### PREPARATION OF THE EQUIPMENT

Always work with clean mixing containers and application material.

## APPLICATION

Pour out EPISOL® FLOORLINE EL and spread with a flat trowel. Deaerate immediately with a spiked roller, deaerate again after 30 minutes.

## FINISHING

After 48 hours, a single layer EPISOL® PU 43 PU OP EL can be applied.

## APPLICATION CONDITIONS

The recommended processing temperature for substrate, environment, material and products is between +15 °C and +25 °C. Relative humidity: Max. 85%

Dew point: The temperature of the substrate and of the not fully cured product must be at least 3 °C higher than the dew point. Avoid condensation on the surface from the moment that the preparations start until the complete curing of the products. Ensure adequate ventilation and a low relative humidity during curing.

## CLEANING AND MAINTENANCE

Clean the used tools with SOLVENT MEK before the curing of EPISOL® FLOORLINE EL. Cured products residues must be removed mechanically.

For the cleaning and maintenance of the installed synthetic resin system, please refer to the information leaflets:

Cleaning and maintenance of synthetic resin floor systems - INDUSTRY  
Cleaning and maintenance of synthetic resin floor systems - PUBLIC AND PRIVATE BUILDINGS.

## COMPLIMENTARY PRODUCTS

- EPISOL® PRIMER EL WB
- Self-adhesive copper strips
- Cleaning solvent for tools: SOLVENT MEK
- Coloured topcoat EPISOL® PU 43 OP EL

## ADVICE / FOCAL POINTS

When treating a new concrete surface, this must be at least 28 days old.

## TECHNICAL DATA

### APPEARANCE - COMPOSITION

A-component	Modified epoxy resin
B-component	Modified polyamine hardener
C-component	Dry filler
Colours	On demand

### REACTION TIMES

Processing time after mixing: 20 minutes.

Trafficable After 24 hours

Full mechanical load After 4 days

Full chemical resistance After 7 days

Times measured at 20 °C; lower temperatures extend the curing time.

### CONSUMPTION

1.4 kg/m<sup>2</sup> per mm layer thickness


## TECHNICAL DATA

Density	1.4 kg/dm <sup>3</sup>
Electrical conductivity	10e4 – 10e6 Ω
Surface	Smooth, satin gloss
Compressive strength	>35 N/mm <sup>2</sup>
Flexural strength	>18 N/mm <sup>2</sup>
Bonding to concrete	>1.5 N/mm <sup>2</sup>
Hardness Shore-D	75 – 85
Fire class	Class M2
Heat resistance	60 °C
Layer thickness	2 - 2.5 mm
Min. Curing temperature	+10 °C
Application temperature	+15° - +30 °C
Curing	Shrink-free

## CHEMICAL RESISTANCES

Good chemical resistance to alkalis, petroleum derivatives, acid, diluted organic acids, salts and solutions. For more information please contact RESIPLAST NV.

## CE MARKING

	
Resiplast NV, Gulkenrodestraat 3, B-2160 Wommelgem	
12	
EN 13813	
Resin screed/coating for use indoors in buildings.	
Reaction to fire	E <sub>fl</sub>
Release of corrosive substances	SR
Water permeability	NPD
Abrasion resistance (Taber)	AR 0.5
Adhesion strength	>B 2,0
Impact resistance (DIN EN ISO 6272)	>10 Nm
Soundproofing	NPD
Sound absorption	NPD
Thermal resistance	NPD
Chemical resistance	NPD

## REFERENCE DOCUMENTS



FM 78518



EMS 716699

## PACKAGING

EPISOL® FLOORLINE EL	Comp A	Comp B	Comp C
Set 29 kg	11.5 kg	5 kg	12.5 kg

## STORAGE AND SHELF LIFE

Store EPISOL® FLOORLINE EL in a dry, well-ventilated storage area between +5 and +35 °C.

Shelf life: 24 months after production date.

C component shelf life: unlimited.

In case of doubt, please contact RESIPLAST NV and state the batch number on the packaging. Do not discharge into groundwater, surface water or sewers. Dispose of contaminated packaging and residues in accordance with the applicable legal requirements.

## SAFETY PRECAUTIONS

Carefully read the safety data sheets before using EPISOL® FLOORLINE EL. Ensure adequate ventilation, keep away from sources of ignition and do not smoke. Avoid skin contact. Eye irritation and/or hypersensitivity may occur with severe vapour concentration, inhalation and/or skin contact. Do not store food (food, drinks) in the same workspace. Always wear personal safety equipment in accordance with the applicable local guidelines and legislation. Gloves and safety glasses are mandatory.

The above information is provided in good faith, but without any guarantees. The application, use and processing of the products are beyond our control and are, as such, the sole responsibility of the user/processor. In the event that KorAC NV is still held liable for damages, then the claim will still be limited to the value of the goods delivered. We always aim to deliver consistently high quality goods. All values on this technical sheet are average values that result from tests carried out under laboratory conditions (20 °C and 50% RH). Values that are measured on the construction site may show a slight deviation since the environmental conditions, the application, and the way of processing our products are beyond our control. Do not add any products other than those indicated on the technical documentation. This version replaces all previous versions. Version 2.0 Date: 6 January 2023 3:36 pm