

# EPISOL® EM

EPOXY TROWEL MORTAR FOR HIGH MECHANICAL LOADS



## DESCRIPTION

EPISOL® EM is a vapour permeable, highly mechanically loadable trowel mortar.

## BENEFITS

- High mechanical resistance
- Can be applied inside and outside
- Vapour permeability
- Non-slip
- Can be walked on after 12 hours
- Good smoothing qualities
- Moisture-insensitive hardening
- High chemical resistance

## FIELD OF APPLICATION

EPISOL® EM is for indoor and outdoor use. Used in warehouses, workplaces, garages, heavy mechanical industry. Suitable for ramps.

## 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>

EPISOL® EM must be applied on a dry surface. 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, correct measures must be taken to fill in or smooth out the unevenness with products that are complementary to the substrate and to the synthetic resin system 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

- Paint roll
- Mixing bucket

### PREPARATION OF THE SUBSTRATE

Make sure the surface is clean. The recommended processing temperature for the surface, the surroundings and the material is 15 to 25 °C. Do not use below 10 °C.

Apply EPISOL® EM on a still tacky coat of EPISOL PRIMER EM or on a sprinkled cured primer coat.

### PREPARATION OF THE PRODUCT

Stir the base (component A) evenly before use. Add the full amount of hardener (component B) and mix mechanically (300 rev/min) until both components are homogeneous. Slowly add the filler component to the mix. Mix until homogeneous.

### PREPARATION OF THE EQUIPMENT

Always work with clean mixing containers and application material.

### APPLICATION

Spread the mass with a squeegee or trowel. Press firmly and smoothen with trowel.

Apply several coats (wet on wet) for layer thicknesses greater than 1.5 cm.

Minimum layer thickness 6 mm, optimal layer thickness is between 8 and 11 mm.

After 12 hours, EPISOL® EM can be finished off with EPISOL AQ PAINT 2.0, en EPISOL Primer EM.

### COMPLIMENTARY PRODUCTS

- EPISOL PRIMER EM
- Cleaning solvent for tools: SOLVENT MEK

## TECHNICAL DATA

### APPEARANCE

A-component	Modified epoxy resin lightly thixotropic
B-component	Polyamine hardener
C-component	Dry filler
Colour	Sand colour

### REACTION TIMES

After 12 hours of curing, you can walk on the floor.

Can be mechanically loaded after 4 days.

Complete chemical resistance after 7 days at 20 °C, lower temperatures will extend the curing time.


**CONSUMPTION**2 kg/m<sup>2</sup> per mm layer thickness**TECHNICAL DATA**

Specific mass	2.0 kg/dm <sup>3</sup>
Colour	Sand colour
Surface	Non-slip surface
Pressure resistance	>70 N/mm <sup>2</sup>
Flexural strength	>20 N/mm <sup>2</sup>
Tensile strength	>5 N/mm <sup>2</sup>
Adhesion to concrete	2.6 N/mm <sup>2</sup> (exceeds concrete cohesion)
E-modulus	1400 N/mm <sup>2</sup>
Fire class	Class B2
Heat resistance	60 °C
Layer thickness Optimal layer thickness	From 6 mm 8 – 11 mm
Min. processing temperature Min. curing temperature	+10 °C +5 °C
Processing time	+/- 25 minutes at 20 °C
Hardening time at 20 °C	Can be walked on 12 hours Can be mechanically loaded 4 days Can be chemically loaded 7 days
Curing	Non-shrinking
Shelf life	24 months

**CHEMICAL RESISTANCES**

EPISOL® EM has an excellent chemical resistance to alkalis, petroleum derivatives, acid, diluted organic acids, salts and solutions. For more information please contact RESIPLAST NV.

**CE MARKING**

	
KORAC NV, Gulkenrodestraat 3, 2160 Wommelgem, Belgium	
12	
EN 13813	
Synthetic resin floor/coating for indoor use in buildings	
Reaction to fire	E <sub>fl</sub>
Release of corrosive substances	SR
Water permeability	NPD
Abrasion resistance (Taber)	<15mg (CS10-1000tr-1kg)
Adhesion strength	B 1,5
Impact resistance (DIN EN ISO 6272)	>10Nm
Soundproofing	NPD
Sound absorption	NPD
Thermal resistance	NPD
Chemical resistance	NPD

**REFERENCE DOCUMENTS****PACKAGING**

EPISOL® EM	Comp A	Comp B	Comp C
Set 24 kg	1.88 kg	0.72 kg	21.4 kg

**STORAGE AND SHELF LIFE**

Store POLYAC® products in a dry, well-ventilated storage area between +5 and +35 °C.

Shelf life: 12 months after production date.

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

**SAFETY PRECAUTIONS**

Please read the safety data sheets carefully before using POLYAC® products. The products emit a characteristic odour during processing. Provide adequate ventilation. Keep away from sources of ignition. No smoking. Avoid skin contact. Eye irritation and/or hypersensitivity may occur at high vapour concentrations, upon inhalation and/or skin contact. Do not store food or beverages in the work area. Always wear personal protective equipment in accordance with all applicable local regulations and legislation. Gloves and safety goggles 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: 16 January 2023 2:15 pm

