EPISOL® PRIMER RFE

TEMPORARY VAPOUR BARRIER AND UNIVERSAL VAPOUR-PROOF EPOXY PRIMER FOR EPOXY AND POLYURETHANE CAST FLOORS

DESCRIPTION

EPISOL® PRIMER RFE is a universal epoxy primer for epoxy and polyurethane synthetic resin systems and cast floors and can be applied to dry cement-based substrates.
Applied in 2 layers, it can also function as a temporary vapour barrier on slightly moist cement-based substrates (max 8% moisture).

ADVANTAGES

- Odourless
- Solvent free
- Low VOC emissions
- Moisture-insensitive curing
- Long processing time
- Temporary vapour barrier (2 layers)

FIELD OF APPLICATION

EPISOL® PRIMER RFE is extremely suitable as a primer for vapour-tight epoxy and polyurethane synthetic resin systems and can be applied on slightly moist concrete surfaces. Applied in 2 layers, it can also function as a temporary vapour-barrier on dry and slightly moist concrete floors (max 8%).

- Underground and above ground parking decks
- Garages
- Workshops
- Warehouses
- Storage areas for hazardous goods
- Floors to be coated on an industrial basis
- Decorative floors
- Retail spaces
- Public buildings
- Food industry, pharma, industrial kitchens
- 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/mm²
Tensile strength of the substrate: min. 1.5 N/mm²
EPISOL® PRIMER RFE can be applied as a universal primer in one layer on a dry surface. Moisture content in the substrate: ≤ 5% moisture.
EPISOL® PRIMER RFE can be applied as a temporary vapour barrier in 2 layers. Moisture content in the substrate: ≤ 8% 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

- Mixing containers
- Mixer with spindle (min. 300-800 rpm)
- Divider-wiper
- Brush or 2 component paint roller suited for epoxy based products
- 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: as primer ≤ 5% moisture, as temporary vapour barrier, without additional moisture supply from outside the substrate, ≤ 8% 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.
If you choose to work with a seamless plinth, use RESIPOX® PRIMER with RESIPOX® epoxy repair and plinth mortar.
Remove any loose parts by brushing properly and remove dust with an industrial vacuum cleaner.

PREPARATION OF THE PRODUCT

Mixing

Stir the base (component A) homogeneously before use. Add the full amount of hardener (component B) and mix mechanically (300-800 rpm) until both components are homogeneous.

PREPARATION OF THE EQUIPMENT

Always work with clean mixing containers and application material.

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APPLICATION

As a primer

Spread 1 layer of EPISOL® PRIMER RFE with a brush, roller or squeegee.
Optional: To obtain better adhesion of the synthetic resin system to be installed, this layer can be broadcasted with dry granulate (0,2-0,8 mm) immediately after applying.

As a temporary vapour barrier

Apply the first layer of EPISOL® PRIMER RFE.
The second layer EPISOL® PRIMER RFE can be applied after 24 hours. A continuous film should be present and no quartz or other aggregates should be sprinkled in to prevent perforation of the moisture barrier.

FINISHING

After 24 hours the primer can be overcoated with an epoxy or polyurethane synthetic resin system or floor.

APPLICATION CONDITIONS

Conditions during the application and curing of the products.
The recommended processing temperature for substrate, environment, material and products is between +10 °C and +35 °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® PRIMER RFE. Cured products residues must be removed mechanically.
For cleaning and maintenance of the installed synthetic resin systems, please refer to the information sheets:
Cleaning and maintenance of synthetic resin floor systems - INDUSTRY
Cleaning and maintenance of synthetic resin floor systems - PUBLIC AND PRIVATE BUILDINGS.

COMPLIMENTARY PRODUCTS

- Optional: dry quartz sand (0.2-0.8 mm)
- Cleaning solvent for tools: SOLVENT MEK

ADVICE / FOCAL POINTS

When treating a new concrete surface with EPISOL® PRIMER RFE as a primer in 1 coat, it must be at least 28 days old. As a temporary vapour barrier at least 7 days, provided the conditions described under “Substrate preparation” are met.

TECHNICAL DATA

APPEARANCE - COMPOSITION

A-component	Modified epoxy resin
B-component	Polyamine hardener
Colour	Transparent amber

REACTION TIMES

Processing time after mixing: 45 min
Traficable After 24 hours
Full mechanical load: after 7 days
Full chemical resistance: after 7 days
Times measured at 20 °C; lower temperatures extend the curing time.

CONSUMPTION

The consumption depends on the porosity, roughness, and other irregularities of the substrate, below some guide values without taking into account losses during application.

Primer

One single layer: +/- 250 to 400 g/m²

Temporary vapour barrier

First layer: +/- 250 to 400 g/m²
Second layer: +/- 200 g/m² (there should be at least continuous film formation)

TECHNICAL DATA

Density	1.05 kg/dm³
Hardness Shore-D	75 – 85
Bonding to concrete	2.6 N/mm²
Mixing ratio weight	A : B 100 : 42
Curing time at 20 °C	Can be walked on 24 hours Can be mechanically loaded 4 days Can be chemically loaded 7 days
Curing	Shrink-free

CE MARKING

CE

KORAC NV, Gulkenrodestraat 3, 2160 Wommelgem, Belgium	
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EN 13813	
Synthetic resin floor/coating for indoor use in buildings	
Release of corrosive substances	SR
Bond strength	≥ B1,5
Reaction to fire	E_{fl} (B^{fl}-s1 in specifieke systemen)

REFERENCE DOCUMENTS

bsi. ISO 9001:2015 Quality Management FM 78518

bsi. ISO 14001:2015 Environmental Management EMS 716699

ÉMISSIONS DANS L'AIR INTÉRIEUR A+ A+ A B C

PACKAGING

EPISOL® PRIMER RFE	Comp A	Comp B
Set 5 kg	3.52 kg	1.48 kg
Set 15 kg	10.56 kg	4.44 kg
Set 568 kg	400 kg	168 kg

STORAGE AND SHELF LIFE

Store EPISOL® PRIMER RFE in a dry, well-ventilated storage area between +5 and +35 °C.
Shelf life: 24 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

Carefully read the safety data sheets before using EPISOL® PRIMER RFE. 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.

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