

EPISOL® RP

UNIVERSAL, 2 COMPONENT EPOXY AS VAPOUR TIGHT COATING, ADHESIVE, ETC...



DESCRIPTION

EPISOL® RP is a universal, grey 2 component epoxy.

ADVANTAGES

- High wear resistance
- Mechanical strength
- For floors and walls
- Apply with roller or brush
- Glossy
- High chemical resistance
- Easy to maintain
- Anti-slip resistance adjustable by means of sprinkling granulate
- Liquid tight
- Can be applied with airless spray system

FIELD OF APPLICATION

EPISOL® RP can be applied as:

- Chemical resistant vapour- and liquid tight coating for floors and walls, for emergency water basins, in warehouses, garages, workshops, storage areas for hazardous goods.
- As an adhesive bridge to allow fresh concrete to adhere to existing concrete. As glue for concrete, brick, natural stone.
- As a cast-on filler for cuts in concrete and fine joints.

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

Compressive strength of the substrate: min. 1.5 N/mm²

EPISOL® RP must be applied on a dry surface. Humidity degree 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 that they are not following 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)
- As a coating/as an adhesive bridge: brush or 2 component paint roller suited for epoxy based products
- As a glue: tooth comb
- As a joint filler: pouring cup
- 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% humidity) before applying the coating.

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.

Should the flatness of the surface to be treated not meet the requirements, then a scraping or leveling layer can be applied. 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.

Prepare metal surfaces by blasting them. The degree of roughness for metal surfaces is SA 2^{1/2}. Then immediately degrease the surface with SOLVENT MEK. After the SOLVENT MEK has fully evaporated, immediately apply a layer of EPISOL® PRIMER WTF to prevent the steel from re-oxidizing.

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.

PREPARATION OF THE EQUIPMENT

Always work with clean processing and mixing equipment.

APPLICATION

As coating or top layer

Process EPISOL® RP within 25 minutes.

Spread with a brush or 2-component paint roller, always work crosswise. The second layer can be applied after 24 hours. EPISOL® RP can only be diluted with 10% SOLVENT MEK when used as first layer floor coating.

Bonding old concrete to freshly cast concrete

Old concrete must be dry and clean. Spread with a rubber wiper and finish with a paint roller. Pour the fresh concrete into the wet coating (within 3 hours). EPISOL® RP can be applied with an airless spray installation.

Pouring saw cuts and small joints.

Pour the mixed resin into the joint or saw cut with a pouring cup.

FINISHING**Anti-slip**

An anti-slip finish on coating or top layer can be obtained by sprinkling dry granulate in the first layer. Remove excess sand and finish with a top layer of EPISOL® RP.

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 +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 or ethyl acetate before the curing of EPISOL® RP. 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

- Sprinkling granulate if anti-slip finish is required.
- Cleaning the tools or diluting first layer coating: SOLVENT MEK.

ADVICE / FOCAL POINTS

When treating a new concrete surface with EPISOL® RP, it should be at least 28 days old.

Please note, EPISOL® RP is a technical solution regarding chemical resistance. It is not an aesthetic coating or top layer and it can yellow after a while.

TECHNICAL DATA**APPEARANCE - COMPOSITION**

A-component	Modified epoxy resin with filler and pigment
B-component	Polyamine hardener
Colour	Grey

REACTION TIMES

Processing time: ca 25 minutes

Trafficable: after 24 hours of curing

Mechanically resistant: after 4 days

Do not clean with water for 7 days.

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

CONSUMPTION

Coating: 300 g/m² per layer

Anti-slip: 500 g/m² or more

Bonding old concrete to freshly cast concrete: 400 to 500 g/m²

As a glue or joint filler: 1.5 kg/dm³


TECHNICAL DATA

Density	1.5 kg/dm ³
Surface	Smooth or anti-slip
Compressive strength	> 24 N/mm ²
Flexural strength	> 10 N/mm ²
Tensile strength	> 6 N/mm ²
Bonding to concrete	2.6 N/mm ² (Exceeds concrete cohesion)
E-modulus	2400 N/mm ²
Heat resistance	60 °C
Electrical resistance	10 ¹³ Ohm
Layer thickness	ca 400µ (2 layers coating)
Wear resistance Taber (CS10-1000 cycle – 1kg)	≤ 10 mg
Application temperature	+ 10 -25 °C
Minimum curing temperature	+ 10 °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

	
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
Abrasion resistance	≤ AR0,5
Bond strength	≥ B1,5
Impact resistance	≥ IR10
Reaction to fire	E _{fl}

REFERENCE DOCUMENTS

FM 78518



EMS 716699



PACKAGING

EPISOL® RP	COMP. A	COMP. B
Set 5,0 kg	4.12 kg	0.88 kg
Set 12,5 kg	10.20 kg	2.20 kg

STORAGE AND SHELF LIFE

Store EPISOL® RP in a dry, well-ventilated storage area between +5 and +25 °C.

Shelf life: 24 months

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® RP. A characteristic odour arises during processing. 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: 15 November 2023 11:55 am