

# EPISOL® PU TOPCOAT WB

WEAR-BASED POLYURETHANE TOP LAYER FOR EPOXY AND POLYURETHANE RESIN FLOORS.



## DESCRIPTION

Water-based transparent or coloured polyurethane top layer for epoxy and polyurethane synthetic resin floors with a high wear and UV resistance.

## ADVANTAGES

- Water-based - solvent-free
- Water vapor permeable
- Odourless
- Very high UV resistance
- High chemical resistance
- Liquid-tight
- Matt
- Available transparently or in a wide variety of colours (RAL+NCS - see colour information brochure RESIPLAST® NV)
- Limited layer thickness
- High wear resistance
- High coverage ratio
- Low consumption
- Smooth surface
- Low dirt intake

## FIELD OF APPLICATION

- Private buildings
- Public buildings
- Commercial centres
- Office buildings
- Hospitals
- Residential care centres
- Refectories
- Floors to be industrially coated with half heavy load
- 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 preparations and the application of the product it is important to verify the different parameters to obtain good sustainable results.

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: ≤ 10% moisture for vapor open systems and ≤ 5% moisture for vapor closed systems.

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

Technically studied dilatation joints have to be provided. These are reintroduced in the artificial resin to be placed. The flatness of the floor has to correspond with the desired requirements. If this is not the case, correct measures need to be taken to fill up irregularities or

to level with products that are complementary to the substrate and the topcoat to be applied.

Joints and passive cracks or flaws can be overcoated. This is on the condition that they are not used as dilatation joints or if they do not follow different movements of the construction and the substrate and that they are polished with complementary products to the substrate and the artificial resin to be applied.

### REQUIRED TOOLS

Mixer with spindle. (min. 300 tr/min)

Brush or two-component paint roller suitable for polyurethane based products.

Masking tape.

Paint roller bin.

### PREPARATION OF THE SUBSTRATE

EPISOL® PU TOPCOAT WB is placed on a hardened polyurethane or epoxy synthetic resin floor system. Polyurethane and epoxy synthetic resin floors or existing top layers older than 7 days need to be roughened.

Always apply the products on a clean surface, free of adhesion-reducing materials such as dirt, oil, grease, old coatings or surface treatments, etc. The parts of the surfaces to be covered that do not comply with the requirements as described above (Flatness, compressive strength, tensile strength, not corresponding parts, ...) should be treated or removed and repaired according to a correct method with products complementary to the substrate and the top layer yet to be applied.

Remove loose parts by brushing well and remove dust with an industrial vacuum cleaner.

### PREPARATION OF THE PRODUCT

#### Mixing

Stir the hardener (component B) homogeneously before use. Add the full quantity of the resin (component A) and mix mechanically (300 tr/min) until both components are homogeneous.

### PREPARATION OF THE EQUIPMENT

Always work with clean mixing and application equipment.

### APPLICATION

Apply EPISOL® PU TOPCOAT WB from a paint bucket or paint roller tray with a lint-free paint roller. Divide crosswise with heavy pressure. After 15 minutes finish crosswise with a wide paint roller without pressure. Always carry out the last movement in the same direction in order to a difference in structure.

Replace the paint rollers after 45 minutes.

Ensure adequate ventilation during curing.

### FINISHING

Apply a second layer after minimum 6 hours.

### APPLICATION CONDITIONS

Conditions during application and curing of the products.

The recommended processing temperature for the substrate, environment, materials 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 its dew point. Avoid condensation on the surface from the moment the preparations start



until the complete curing of the products. Provide adequate ventilation and a low relative humidity during curing.

## CLEANING AND MAINTENANCE

Clean the used tools with clear water before curing the EPISOL® TOPCOAT WB. Cured product remains have to be removed mechanically.

To clean and maintain 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

Product for cleaning tools: Clear water

## ADVICE / FOCAL POINTS

Synthetic resin floors of unknown composition can only be overcoated after an adhesion test has been performed and the results of this test are positive.

## TECHNICAL DATA

### APPEARANCE - COMPOSITION

A-component	Polyurethane acrylate immersion
B-component	Aliphatic hardener
Colour	Transparent or coloured (RAL + NCS - see RESIPLAST® NV colour information brochure)

### REACTION TIMES

Processing time after mixing: 90 minutes.

Pedestrian traffic: After 6 hours.

Fully mechanically loaded: After 72 hours with sufficient ventilation.

Full chemical resistance: After 7 days. (Attention: water is also a chemical product)

Complete curing: after 7 days.

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

### CONSUMPTION

Approximately 100 g/m² per layer.


### TECHNICAL DATA

Density	1,04 kg/dm³
Viscosity	55 mPa.s
Layer thickness	80-100 µm
Adhesion	>2,0 N/mm²
Surface	Matt

### CHEMICAL RESISTANCES

Good chemical resistance to alkalis, petroleum derivatives, battery acid, dilute organic acids, salts and solutions. Limited resistance (staining) against tannins, antioxidants, plasticizers, etc. Stains are no longer removable and will darken under UV load. For more information please contact RESIPLAST® NV.

## CE TABLE

	
RESIPLAST® NV, Gulkenrodestraat 3, B-2160 Wommelgem	
12	
EN 13813	
Synthetic resin based topcoat - for covering surfaces.	
Reaction to fire	E <sub>fl</sub>
Release of corrosive substances	SR
Water permeability	NPD
Abrasion resistance (Taber)	<10 mg CS10-1000 tr - 1 kg
Adhesion strength	B 1,5
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® PU TOPCOAT WB Coloured	Comp A	Comp B
Set 5,575 kg	5 kg	0,575 kg

EPISOL® PU TOPCOAT WB Transparent	Comp A	Comp B
Set 5,075 kg	4,5 kg	0,575 kg

## STORAGE AND SHELF LIFE

Store EPISOL® PU TOPCOAT WB in a dry, well-ventilated storage room between +5°C and +35°C. Shelf life: 24 months after production date.

When in doubt, contact RESIPLAST® NV and enter the batch number mentioned on the packaging. Do not discharge into groundwater, surface water or sewerage. Dispose of contaminated packaging and waste according to the applicable legal requirements.

## SAFETY PRECAUTIONS

Carefully read the safety instructions before using EPISOL® AQ PAINT 2.0. A characteristic odour is created 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 vigorous vapor concentration, inhalation and / or skin contact. Do not store provisions (food, drinks) in the same workspace. Always wear personal protective equipment in accordance with 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 Resiplast N.V. 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: 5 November 2020 1:41 pm