# EPISOL® PU 43 OP MAT

**POLYURETHANE TOP COAT**



## DESCRIPTION

Matt, wear-resistant polyurethane top layer for epoxy and polyurethane synthetic resin floors with orange peel effect.

## ADVANTAGES

- One component
- Transparent or extensive colour palette (Pigment powder - RAL - see RESIPLAST® NV colour information brochure)
- Very high UV resistance
- Very high wear and scratch resistance
- Low consumption
- Surface with light structure
- Low dirt build-up

## FIELD OF APPLICATION

As a top layer on an epoxy or polyurethane synthetic resin floor system

- Private buildings
- Public buildings
- Commercial centres
- Office buildings
- Hospitals
- Residential care centres
- Refectories
- Floors to be industrially coated with 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/mm²
Tensile strength of the substrate: min. 1,5 N/mm²
Moisture content in the substrate: ≤ 10% moisture for vapor open systems and ≤ 5% moisture for vapor closed systems.
Conditions during application and curing: see "Application conditions" further described in this technical data sheet.
Technically studied dilatation joints have to be provided. These are reintroduced in the 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 system 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 levelled with complementary products to the substrate and to the resin to be applied.

### REQUIRED TOOLS

Mixer with spindle (min. 300 tr/min)
Paint roller suitable for polyurethane based products.
Masking tape.
Paint roller bin

### PREPARATION OF THE SUBSTRATE

EPISOL® PU 43 OP MAT 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**
Transparent:
Stir in EPISOL® PU 43 OP MAT homogeneously before use.
Coloured:
Stir in EPISOL® PU 43 OP MAT homogeneously. Then add 0.75 kg of pigment powder and mix mechanically (300 RPM) until both components are homogeneous before use.

### PREPARATION OF THE EQUIPMENT

Always work with clean mixing and application equipment.

### APPLICATION

Apply EPISOL® PU 43 OP MAT with a lint-free roller using a paint bucket or paint roller tray.
Spread crosswise using firm pressure.
Finish after 15 minutes with a broad paint roller working crosswise.
The last paint strokes should always be in the same direction to avoid structural differences.
Replace the paint rollers after 45 minutes.

### FINISHING

A second layer can be applied after 24 hours.
NOTE:
Finishing a synthetic resin floor with 1 layer of EPISOL® PU 43 OP MAT = Vapour permeable, with 2 layers EPISOL® PU 43 OP MAT = Vapour tight.

### 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 SOLVENT MEK before curing the EPISOL® PU 43 OP MAT. 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

If coloured top layer desired:
Pigment Powder (can be ordered separately)
Cleaning solvent for tools: SOLVENT MEK

## ADVICE / FOCAL POINTS

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

# TECHNICAL DATA

## APPEARANCE - COMPOSITION

| | |
|---|---|
| 1 component | Modified polyurethane |
| Colour | Transparent.<br>If coloured top layer is desired: Order pigment powder separately. (RAL - see RESIPLAST® NV colour information brochure). |

## REACTION TIMES

Processing time after mixing: 45 minutes
Pedestrian traffic: After 6 hours.
Mechanically loaded: After 48 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

Transparent: 100 g/m² per layer
Tinted: 120 g/m² per layer.

## TECHNICAL DATA

| | |
|---|---|
| Specific mass | 1.1 kg/dm³ |
| Viscosity | 350 mPa.s |
| Layer thickness | 80 – 100 µm |
| Adhesion | >2.0 N/mm² |
| Surface | Mat, orange peel |
| Hardness Shore D | 80 – 90 |
| Mixing ratio | Transparent: Ready for use<br>For coloured top coat:<br>5 kg Transparent + 0.75 kg Pigment powder |
| Curing | Non-shrinking |

## CHEMICAL RESISTANCES

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

## CE TABLE

CE

RESIPLAST® NV, Gulkenrodestraat 3, B-2160 Wommelgem

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EN 13813

Synthetic resin based topcoat - for covering surfaces.

| | |
|---|---|
| Reaction to fire | NPD |
| Release of corrosive substances | SR |
| Water permeability | NPD |
| Abrasion resistance (Taber) | <10 mg CS10-1000tr - 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

# PACKAGING

| | |
|---|---|
| EPISOL® PU 43 OP MAT | Comp A |
| Set 5 kg transparent | 5 kg |

# STORAGE AND SHELF LIFE

Store EPISOL® PU 43 OP MAT in the original, closed packaging and in a dry, well ventilated storage area between +5 and +35°C.
Shelf life: 6 months.

If in doubt, contact RESIPLAST® NV and provide the batch number on the package. Do not let the product get in contact with ground water, surface water or sewage systems. Dispose of contaminated packaging and remnants according to legal regulations.

# SAFETY PRECAUTIONS

Carefully read the safety instructions before using EPISOL® PU 43 OP MAT. Products have a characteristic odour when being applied. Ensure there is sufficient ventilation, stay away from ignition sources and do not smoke. Avoid contact with skin. Eye irritation and/or sensitivity may occur during heavy vapour concentrations, inhalation and/or skin contact. Do not keep food products (food, beverages) in the same workspace. Always wear personal protective equipment according to local guidelines and regulations. Gloves and safety goggles are mandatory.