

EPISOL® SLW

WATER-BASED AND VAPOUR-PERMEABLE EPOXY SCREED FLOOR



DESCRIPTION

EPISOL® SLW is a seamless, water-based and vapor-permeable epoxy screed that can be applied to concrete with a damaged or missing vapor barrier. Depending on the chosen filler, the screed floor can be applied in various thicknesses. (from 1 to 2 mm, 3 to 4 mm or 5 to 6 mm)

EPISOL® SLW with a thickness of 1 to 2 mm can also be used as a scraping or levelling layer for the EPISOL® FLOORLINE GREEN systems

ADVANTAGES

- Resistant to 100°C
- Vapor permeable
- Water-based, solvent-free
- Odour-free
- High wear resistance
- High mechanical strength
- Extensive colour palette (RAL + NCS – See colour information brochure RESIPLAST® NV)
- Matt
- High chemical resistance
- Liquid-tight
- High UV resistance
- Resistant against high temperatures

FIELD OF APPLICATION

Suitable for covering floors

- Food industry
- Industrial kitchens and large kitchens
- Parking garages
- Heavy industry
- Transport, storage and transfer
- Chemical and petrochemical industry
- Pharmaceutical industry and laboratories
- Private, public and commercial spaces
- Cellars
- 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

EPISOL® SLW is placed on a cured primer layer of EPISOL® PRIMER WTF. The system can be applied on a slightly damp surface with this primer.

Moisture content in the substrate: ≤ 10% moisture

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

Technically studied dilatation joints need to be provided. These are reintroduced in the resin to be placed. The flatness of the floor has to be corresponding with the desired requirements. If this is not the case, correct measures need to be taken to fill up irregularities or to leveling with products that are complementary to the substrate and the resins to be applied.

Passive joints and cracks or flaws can be covered. 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 the to the resin to be applied.

REQUIRED TOOLS

Mixer with spindle (min. 300 tr/min)

Flat trowel or tooth comb

Point roller

Masking tape

PREPARATION OF THE SUBSTRATE

Cracks, flaws, joints and other parts showing water leaks first need to be made completely water and leak proof. The surface has to be pre-treated mechanically. This can be done by shot- or sandblasting the surface dust-free or by grating the surface. This treatment ensures the surface will have an open texture, to remove the cement skin of concrete and old debris of coatings and glue. High pressure water jets can also be used but then the surface needs to dry sufficiently (Moisture content in the substrate: ≤ 10% moisture) before applying the resin system.

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 (compressive strength, tensile strength, not corresponding parts...) should be treated or removed and restored according to a correct method with products that are complementary to the substrate and the resin system to be applied.

In case the flatness of the floor does not meet the desired requirements then a scraping or levelling layer can be applied. EPISOL® PRIMER WTF as primer with EPISOL® SLW 1-2 as scraping or leveling layer). If you choose to work with a seamless plinth, use RESIPOX® PRIMER with RESIPOX® epoxy repair and plinth mortar. Remove loose parts by brushing well and remove dust with an industrial vacuum cleaner.

Prepare metal substrates by blasting them. The rough level of strength for metal surfaces is SA 2 1/2. Then degrease the surface immediately with SOLVENT MEK. After completely evaporating the SOLVENT MEK immediately apply a layer of EPISOL® PRIMER WTF to prevent the re-oxidation of the steel before overlaying the surface with synthetic resins.

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. The filler component is slowly added to the mixture. Mix to a homogeneous mass.

Fillers and quantity to be used in function of the desired thickness of the screed:

EPISOL® SLW Thickness: 1-2 mm				
Set weight (in kg)	Resin comp A (in kg)	Hardener comp B (in kg)	Filler comp C (in kg)	
20,61	2,28	5,83	12,5	= 1x component C EPISOL® FLOORLINE 1-2 of 12,5 kg
41,22	4,56	11,66	25	= 2x component C EPISOL® FLOORLINE 1-2 of 12,5 kg
61,83	6,84	17,49	37,5	= 3x component C EPISOL® FLOORLINE 1-2 of 12,5 kg
EPISOL® SLW Thickness: 3-4 mm				
Set weight (in kg)	Resin comp A (in kg)	Hardener comp B (in kg)	Filler comp C (in kg)	
22,50	2,28	5,83	14,4	= 1x component C EPISOL® SLW
45,02	4,56	11,66	28,8	= 2x component C EPISOL® SLW
67,53	6,84	17,49	43,20	= 3x component C EPISOL® SLW
EPISOL® SLW Thickness: 4-5 mm				
Set weight (in kg)	Resin comp A (in kg)	Hardener comp B (in kg)	Filler comp C (in kg)	
34,93	2,28	5,83	26,83	= 1x component C EPISOL® MC
69,88	4,56	11,66	53,66	= 2x component C EPISOL® MC
104,88	6,84	17,49	80,49	= 3x component C EPISOL® MC

PREPARATION OF THE EQUIPMENT

Always work with clean mixing and application equipment.

APPLICATION

Pour out EPISOL® SLW and spread the product over the entire surface with a flat trowel or tooth comb with a triangular saw blade profile. Vent immediately with a point roller.

FINISHING

After 48 hours, a suitable top layer of EPISOL® AQ PAINT 2.0, EPISOL® PU TOPCOAT WB or EPISOL® PU 43 OP MAT can be applied. Also consult the technical data sheets of these products.

APPLICATION CONDITIONS

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® SLW. 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

- For cleaning the used tools: Clean water
- Primer: EPISOL® PRIMER WTF
- Filler: see box above "PREPARING THE PRODUCT "
- Suitable Top layers: EPISOL® AQ PAINT 2.0, EPISOL® PU 43 OP MAT or EPISOL® PU TOPCOAT WB

ADVICE / FOCAL POINTS

A new concrete surface should be at least 7 days old when treated with EPISOL® SLW

TECHNICAL DATA

APPEARANCE - COMPOSITION

A-component	Epoxy resin
B-component	Modified Polyamine hardener with filler and pigment
C-component	Dry filler
Colour	Extensive colour palette (RAL + NCS - see RESIPLAST® NV colour information brochure)

REACTION TIMES

Processing time after mixing: 30 minutes.

Pedestrian traffic: After 24 hours.

Fully mechanically loaded: After 4 days.

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 prolong the curing time.

CONSUMPTION

1,5 kg/m² per mm layer thickness.

TECHNICAL DATA

Specific mass	1.5 kg/dm ³
Surface	Smooth, satin shine
Pressure resistance	>35 N/mm ²
Flexural strength	>18 N/mm ²
Adhesion to concrete	>1.5 N/mm ²
Hardness Shore D	75 - 85
Fire class (EN 13501)	Bfl-s1
Water vapour-permeability	WVP 6.67*10 ⁻⁷ g/m ² .s.Pa
Water vapour transmission	WVT 9.75*10 ⁻⁴ g/m ² .s
Water vapour-permeability coeff.	σ 1.44*10 ⁻⁷
Heat resistance	100°C
Layer thickness	1 to 2 mm / 3 to 4 mm / 5 to 6 mm depending on the filler used
Perseverance	Shrink-free

CHEMICAL RESISTANCES

Good chemical resistance to alkalis, petroleum derivatives, battery acid, dilute organic acids, salts and solutions. For more information you can consult our chemical resistance table on www.resiplast.be or contact RESIPLAST® NV.

CE TABLE

	
RESIPLAST® NV, Gulkenrodestraat 3, B-2160 Wommelgem	
12	
EN 13813	
Synthetic resin screed floor - for covering surfaces.	

Reaction to fire	B _{fl} -s1
Release of corrosive substances	SR
Water permeability	NPD
Abrasion resistance (Taber)	<15 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

Fire class (EN 13501): Bfl-s1



PACKAGING

EPISOL® SLW Thickness: 1-2 mm				
Set weight (in kg)	Resin comp A (in kg)	Hardener comp B (in kg)	Filler comp C (in kg)	
20,61	2,28	5,83	12,5	= 1x component C EPISOL® FLOORLINE 1-2 of 12,5 kg
41,22	4,56	11,66	25	= 2x component C EPISOL® FLOORLINE 1-2 of 12,5 kg
61,83	6,84	17,49	37,5	= 3x component C EPISOL® FLOORLINE 1-2 of 12,5 kg
EPISOL® SLW Thickness: 3-4 mm				
Set weight (in kg)	Resin comp A (in kg)	Hardener comp B (in kg)	Filler comp C (in kg)	
22,50	2,28	5,83	14,4	= 1x component C EPISOL® SLW
45,02	4,56	11,66	28,8	= 2x component C EPISOL® SLW

67,53	6,84	17,49	43,20	= 3x component C EPISOL® SLW
EPISOL® SLW Thickness: 4-5 mm				
Set weight (in kg)	Resin comp A (in kg)	Hardener comp B (in kg)	Filler comp C (in kg)	
34,93	2,28	5,83	26,83	= 1x component C EPISOL® MC
69,88	4,56	11,66	53,66	= 2x component C EPISOL® MC
104,88	6,84	17,49	80,49	= 3x component C EPISOL® MC

STORAGE AND SHELF LIFE

Store EPISOL® SLW in a dry, well-ventilated storage room between +5°C and +35°C.

Shelf life 24 months, C component unlimited shelf life.

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® SLW. 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