

EPU ML150

SELF-LEVELING EPOXY COATING IN AQUEOUS DISPERSION FOR CONCRETE FLOORING

In compliance with the requirements of the 13813 EUROPEAN STANDARD for synthetic resin – based screeds.

Description

ML150 is a two-component self-leveling, epoxy-cement coating, especially made to prepare cement screeds, and wet ones as well. It can also be used to coat vertical surfaces.

ML150 contains the desiccated version of a polymer and a selection of special additives which provides high adhesion to various substrates and reduces shrinkage and improve physical and application properties.

Features

- Easily washable smooth surface
- Anti-skid satin appearance
- Breathable
- No release of irritant or smelly substances
- Good resistance to diluted acid and alkaline solutions
- Application temperature +10°C to +30°C with relative humidity <70%

Fields of application

Coatings with a thickness of about 2,5mm for the horizontal application.

ML150 is a material can be installed both outdoors and indoors, has excellent bonding on all construction materials such as: concrete, natural stone, bricks, cement slabs. It is suitable for: Garages, Food industries, Chemical industries, Mechanical engineering industries.

It also gives good waterproof barrier as a counterbalance even under pressure and is possible to coat it with low, medium or high thickness epoxy, polyurethane.

Application guidelines

ML150 can be applied with smooth trowel.

a) Substrate Preparation

Surface must be clean, grind and dry. Remove dust, laitance, grease, curing compounds, Preparation bond inhibiting impregnations, waxes and any other contaminants. All projections, rough spots, etc. should be dressed off to achieve a level surface prior to the application. Concrete - Should be cleaned and prepared to

achieve a laitance-free and contaminant-free, open textured surface by shot blasting or equivalent mechanical means (CSP-3 to CSP-4 as per ICRI guidelines). Sweep and vacuum any remaining dirt and dust with a wet/dry vacuum. Removing residual dust will help ensure a tenacious bond between the primer and substrate. Whenever “shot-blasting” is utilized, be careful to leave concrete with a uniform texture. “Over-blasting” will result in reduced coverage rates of the primer and/or subsequent topcoats. The “shotblast” pattern may show through the last coat, known as “tracking”. The compressive strength of the concrete substrate should be at least 3,500 psi (24 MPa) at 28 days and at least 215 psi (1.5 MPa) in tension at the time of application.

b) Preparation of the product

For bulk packaging, when not mixing full units, each component must be pre-mixed separately to ensure product uniformity.

Premix each component separately. Empty Component B (Hardener) in the correct mix ratio into Component A (Resin) then add Component C (polymer) and add about 5-8% water. Mix the combined components for at least 3 minutes using a low speed drill (300 - 450 rpm) and Exomixer or Jiffy type paddle suited to the volume of the mixing container to minimize entrapped air. Be careful not to introduce any air bubbles while mixing. Make sure the contents are completely mixed to avoid any weak or partially cured spots in the coating. During the mixing operation, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing.

It is important to remember that this coating has a limited pot life, thus mix only the quantity that can be used within its pot life. Do not leave the mix in the container too long because it will shorten its pot life.

c) Application

ML150 - ANTISKID

Depending on the desired thickness use quartz of different granulometry: quartz 0,1-0,5 to obtain a thickness of 1,5 mm, quartz 0,3-0,8 to obtain a thickness of 2-2,5 mm.

On the shot peened surface apply 1-1,5 kg/m² of product by smooth trowel, mixed up to 25 % with quartz, calculated on component A. On the wet resin broadcast quartz to saturation with a consumption of about 4 kg/m².

The following day remove the excess unbound quartz, perform a light sanding and apply **ML150** pure.

ML150 – SELFLEVELING

Apply one coat of pure ML150

As a finish, we recommend using one of our transparent or colored varnishes, e.g. EPU C600 or EPU H2O.

d) Tools cleaning

The tools must be cleaned with water after use.

Handling and storage

ML150 can be stored for 12 months in its original packaging in a dry place at a temperature between +5°C and +35°C.

Wear protective equipment (gloves/safety glasses/clothing) to prevent contact with skin and eyes. Keep container closed in a cool dry place. Wash skin thoroughly with soap and water after use. Use with adequate, general and local, exhaust ventilation. In absence of adequate ventilation, use a properly fitted NIOSH respirator. Remove contaminated clothing. Launder before reuse.

PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA		
COLOR	RAL	STANDARDS
POT LIFE AT 22°C	25 MINUTES	EN ISO 9514
DENSITY	2,05 +/- 0,05 kg/l	UNI EN ISO 2811-1
MIXING RATIO A/B	100 / 14	-
VISCOSITY AT 20°C	15000 +/- 3000 mPa·s	UNI EN ISO 2555
WATER VAPOUR TRANSMISSION	$\mu < 2800$ (3,0mm)	EN 12086
LIQUID WATER PERMEABILITY	$W < 0,1 \text{ kg/m}^2 \times \text{h}^{1/2}$	EN 1062-3
SHORE D HARDNESS	>80	EN ISO 868
CURE RATE Touch dry / Complete curing	5h / 10 days	77°F / 25°C
RESISTANCE TO SEVERE CHEMICAL ATTACK	SULPHURIC ACID 20% - CLASS I SODIUM HYDROXIDE 20% - CLASS II	EN 13529

CE		
PERFORMACES IN COMPLIANCE TO CERTIFICATION CE EN 13813		
Product type 2710		DoP 126
Characteristics	Product performance	Test Method
Reaction to fire	F _{FL}	EN 13501-1
Corrosive substances release	SR	
Liquid water permeability	w < 0,1 kg/m ² x h ^{1/2}	EN 1062-3
Compressive strength	NPD	EN 13892-2
Flexural strength	NPD	EN 13892-2
Wear resistance	AR 0,5	EN 13892-4
Bond strength	B2,0	EN 13892-8
Impact resistance	NPD	EN ISO 6272
Sound insulation	NPD	EN ISO 140-6
Sound absorption	NPD	EN 12354-6
Thermal resistance	NPD	EN 12664
Resistance to severe chemical attack	CR11 (Class II), CR10 (Class I)	EN 13529

CR10: Sulphuric acid at 20%
CR11: Sodium hydroxide at 20%

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