

EPU E300

EPOXY FINISH IN AQUEOUS DISPERSION WITH VERY LOW VOC EMISSIONS IN COMPLIANCE WITH LEED 4.2

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

Description

E300 is a two-component epoxy resin, VOC – free, perfect for concrete floors and walls.

Features

- Perfect for concrete floors and walls
- VOC-free
- Applicable in closed places
- Suitable for the food industry
- Excellent abrasion resistance
- Glossy appearance
- Conductive version available
- Applicable from +10°C to +40°C on the surface

Fields of application

E300 is used as an epoxy painting for floors, warehouses, parking lots, hospitalsm schools, factories, offices, laboratories etc. Ideal for the food industry where the coating of floors and walls is necessary for a simple and effective hygiene.

Application guidelines

E300 can be applied with brush, roller, airless spray gun.

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). 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

On absorbing supports, thin the first layer with 15% water, the following finish layers have to be thinned with 10% water.

Handling and storage

E300 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 COLOURS	STANDARDS
POT LIFE AT 22°C	40 +/- 10 MINUTES	EN ISO 9514
DENSITY *Converter *Coloured	1,14 +/- 0,05 kg/l 1,05 +/- 0,05 kg/l	UNI EN ISO 2811-1
MIXING RATIO A/B	30 / 100	-
VISCOSITY AT 20°C *Converter *Coloured	2000 +/- 500 mPa·s 7000 +/- 1500 mPa·s	UNI EN ISO 2555
NON-VOLATILE-MATTER CONTENT By weight By volume	62,3% 51,4%	EN ISO 3251
PULL-OFF STRENGTH	>3 MPa	ASTM D4541
ABRASION RESISTANCE	<25 mg	UNI 8298-9 Wheel CS10 1000 g, 1000 cycles
HARDNESS BY PENCIL TEST	5H	ISO 15184
ELECTRICAL RESISTANCE	Between 10 ⁴ and 10 ⁶ Ω	UNI 8298-10
RESISTANCE TO SEVERAL CHEMICAL ATTACK	Sulphuric acid 20% - Class I Sodium hydroxide 20% - Class II	EN 13529
CURE RATE Touch dry / Complete curing	4h / 10days	77°F / 25°C

*20% water was added before the measurement

**10% water was added before the measurement

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	CR10 (Class I) CR11 (Class II)	EN 13529

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

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