NON-PIGMENTED TWO-COMPONENT EPOXY RESIN MATT SEALER WITH GOOD RESISTANCE TO CHEMICALS, CONTAINS SOLVENTS

DESCRIPTION

EP 860 is a 2-component epoxy resin sealer, which contain solvents. The products are suitable for matt sealing of epoxy resin and mortar coatings with an increased demand to chemical resistance. EP 860 result in a pearl matt surface with an even matt appearance. Disturbing “mirror effects” of glossy coatings disappear by light dispersion resulting in a settled surface. EP 865 EL+ is a product variant of EP 860, provided with electrically-conductive additives for the production of scattered and coloured-sand coatings (conductive RX coatings). Please carry out electrical conduction tests within system in case other alternative usages are planned. Process the material with a solvent-resistant short floor roller using criss-cross strokes. EP 860 with their jelly consistency offer good wettability properties, especially for textured mortar coatings, resulting in a finely textured surface. EP 860 offer good adhesion on epoxy resin substrate. The material cures by drying and chemically cross linking to a durable, robust film with good adhesion. EP 860 offer good resistance to chemicals as a sealer. The material is resistant to water, salt solutions, sodium hydroxide, diluted mineral acids, fuel, oil, and solvents. Because EP 860 is only slightly susceptible to staining and are therefore especially suitable for kitchen areas and the food processing industry for scattered coatings with coloured sand. Note: In special cases, especially with vibrant colours, the cleaning might cause a loss of colour. This can be avoided by laying an additional transparent sealing, e.g. EP 860. If necessary, ask for a consultancy.

RECOMMENDED FOR

Typical areas of application are:

- EP 860 are used as matt sealer for industrial epoxy resin mortar coatings with increased demand to mechanical load and chemical resistance.
- Suitable as finish sealer for coloured sand scattered coatings for kitchen areas and the food processing industry.
- As finish for smooth coatings for slip resistance surfaces R10.

ADVANTAGES

- Finely textured surface
- Highly chemical resistant
- Matt surface
- Mostly repellent to stains
- Very economical, little consumption
- BIA tested: slip resistance grade R10
- Free of deleterious substances against varnish

TECHNICAL CHARACTERISTICS

Characteristic	Test Result	Test Method
Viscosity (Components A+B)	250 mPa s	EN ISO 3219 at 73.4 ºF (23 ºC)
Density (Components A+B)	1.02 kg/lt	EN ISO 2811-2 at 68 ºF (20 ºC)
Color	Non-pigmented, matt	
Solid content	> 40 %	KLB-Method
Abrasion (Taber Abraser)	< 50 mg	ASTM D4060
Brightness (85º)	10	DIN 67530
Layers	On fresh coating 1-2 application	

PRODUCT DATA SHEET

NON-PIGMENTED TWO-COMPONENT EPOXY RESIN MATT SEALER WITH GOOD RESISTANCE TO CHEMICALS, CONTAINS SOLVENTS

Characteristic	Test Result	Test Method
Processing time at 59 ºF (15 ºC)	120 minutes	
Processing time at 68 ºF (20 ºC)	90 minutes	
Processing time at 86 ºF (30 ºC)	60 minutes	
Processing temperature	Minimum 59 ºF (15 ºC) room and floor temperature	
Curing time at 59 ºF (15 ºC)	24-36 hrs (Accessibility)	
Curing time at 68 ºF (20 ºC)	18-24 hrs (Accessibility)	
Curing time at 86 ºF (30 ºC)	14-18 hrs (Accessibility)	
Curing	2-3 days for mechanical load at 68 ºF (20 ºC) 7 days for chemical resistance at 68 °F (20 ºC)	
Further coatings	After 18-24 hours, but not longer than 48 hours at 68 ºF (20 ºC)	

The aforementioned results are related to average laboratory test results. In reality the climate changes, such as temperature, moisture and surface porosity may change these results.

DIRECTIONS FOR USE

Surface Preparation: The substrate has to be dry and absolutely clean. Usually sealing is the last coat. Make sure that prior layers haven't been soiled already. The optimum point of time for sealing is when the prior layer has built a film but not cured already. At 68 °F (20 °C) this applies after usually 12 hours at the earliest but not longer than 36 hours. Please note the recommendations for the coatings to be sealed. Test for adequate adhesion when sealing at a later point of time. Cured coatings can also be sealed due to the good adhesion. Thorough cleaning and grinding of the area is required. When sealing older substrate conduct a trial to ensure adequate adhesion.

Mixing: EP 860 will be supplied in the correctly measured mixing ratio. Component A has sufficient volume for the entire trading unit. Decant the hardener component B into the resin completely. Blend with a slow speed mixer (200 - 400 r/pm) for at least 2-3 minutes, for a homogeneous mixture, free of streaks. To avoid mixing errors, it is recommended to principally empty the resin/hardener-mixture into a clean container and mix briefly once again.

Mixing ratios:

A:B = 100:25 parts by weight
A:B = 100:25 parts by volume

Processing/Handling:

Process right after homogenisation just like with all other reactive resin products. Apply with a lint-free and solvent-resistant velour sealing roller. Divide working areas to avoid duplicate applications and overlaps. Overlapping and duplicate applications may lead to an uneven appearance and streaks. Solvent-containing sealers should only be processed at the recommended temperature, without any insolation or draft.

For larger areas it is recommended that 2 or more people apply the material. One or more people apply the material in one direction, another person distributes the fresh material in a 90°-angle. Use a 50 cm roller for re-rolling on larger areas. Roller should be coated with the material. Use only for distribution not for application. Always work "fresh- in-fresh" and watch for an even distribution. Avoid ponding otherwise blooming and blushing may occur. Watch for a clean surrounding area when sealing. Use suitable rollers only. Access the area only with clean shoes. Keep recommended drying conditions!

Floor- and air-temperature must not fall below 59 °F (15 °C) and/or humidity must not exceed 75 %. The difference in floor- and room-temperature must be less than 37.4 °F (3 °C) so the curing will not be disturbed. If a dew- point situation occurs adhesion may malfunction, curing may be disturbed, and spotting may occur. Exposure to water should be avoided within the first 7 days. Curing time applies to 68 °F (20 °C). Lower temperature may increase, higher temperature may decrease the curing and processing time. Processing requires occupational health and safety procedures. Note the DIN-Safety Data Sheet. Avoid any source of ignition and open fire. Vent rooms after sealing.

If working conditions are not complied with, deviations in the described technical properties may occur in the end product.

Build-up of Coats:

Industrial mortar coating with a smooth surface

- Prime with the recommended KLB-Base Coat resins, e.g. EP 50. Scatter with fire-dried quartz sand 1 - 2 mm.
- Apply the decorative or industrial mortar with EP 150.
- For smooth coatings seal pores with either applying 2 - 3 times EP 174 / EP 175 or a combined coating with EP 175 and EP 179.
- Apply the finish sealer EP 860 or EP 861 with a solvent-resistant velour roller using criss-cross strokes.

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Slip resistant scattered coating

- Prime with the recommended KLB-Base Coat resins, e.g. EP 50. Scatter openly with quartz sand 0.3/0.8 mm.
- Apply a scratch coat with EP 50 / KLB-Mischsand 2/1, mixing ratio 1 : 0.8 parts by weight for an increased planar substrate.
- Apply a base coat using EP 99, EP 213, or EP 216 UNIVERSAL, in a layer of approx. 1 - 2 mm. Afterwards scatter completely with coloured sand, grain size 0.3/0.8 or 0.7/1.2 mm. Sweep off any excess after 24 hours. If necessary grind and vacuum.
- Resinate the surface with EP 175 Spezial with a rubber coating knife, afterwards use a velour roller for the desired slip resistance.
- Apply the finish sealer EP 860 with a solvent-resistant velour roller using criss-cross strokes.

Suitable coatings

The following self-levelling coatings can be sealed with EP 860 / EP 860 Clean:

EP 200 VF, EP 202, EP 202 Clean, EP 213, EP 213 RAPID, EP 216 UNIVERSAl, EP 216 RAPID, EP 220, PU 405, PU 410, PU 420, PU 421, PU 425 Comfort.

With other coatings adhesion must be tested. The surface adhesion can anyway be improved by grinding

COVERAGE

0.130 – 0.180 kg/m^2 for each application.

SPECIAL CONSIDERATIONS

To remove fresh contamination and to clean tools, use thinners VR 28 or VR 33 immediately. Hardened material can only be removed mechanically.

Please note our maintenance and care recommendation for sealed floorings.

The product is subject to the hazardous material-, operational safety-, and transport-regulations for hazardous goods. Refer to the DIN-Safety Data Sheet and the information on the labelled containers!

GISCODE: RE 3

Indication of VOC-Content: (EG-Regulation 2004/42), Maximum Permissible Value 500 g/l (2010,II,j/lb): Ready-for-use product contains < 500 g/l VOC.

Contact PENETRON HELLAS S.A. for additional information, regarding your project.

PACKAGING

EP 860 is available in 8+2 kg and 20+5 kg. containers.

STORAGE / SHELF LIFE

Store in dry and frost-free conditions. Ideal storage temperature is between 50 - 68 °F (10 - 20 °C). Bring to a suitable working temperature before application. Tightly re-seal opened containers and use the content as soon as possible. When properly stored in a dry place in unopened and undamaged original packaging, shelf life is 12 months.

SAFE HANDLING INFORMATION

Avoid skin and eye contact. If contact is made, flush areas with lots of water and seek medical advice. Protective gloves, mask and goggles should be worn. For further information please refer to Safety Data Sheet. PENETRON HELLAS S.A. has recently updated Safety Data Sheet on the safe use of PENETRON® products. Each Safety Data Sheet contains health and safety information for the protection of your employees and your customers. KEEP OUT OF REACH OF CHILDREN.

CERTIFICATION

Slip resistance grade R10 possible, according to DIN 51130 and BGR 181.

Suitable for use in foodstuffs according § 31 para.1, German Food and Feed Code (German law LFGB).

Please ask for the tested system structure.

CE

KLB Kötztal Lacke + Beschichtungen GmbH
Günztalstraße 25
FRG-89335 Ichenhausen
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EP860/EP860CLEAN-V1-022013
DIN EN 13813:2003-01
Synthetic resin screed mortar
DIN EN 13813: SR-B1.5-AR0.5-IR16
Fire behavior: E_{fl}-s1
Emission of corrosive substances: SR
Wear resistance BCA: AR 0.5
Adhesive tensile strength B 1.5
Impact resistance: IR 16

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PENETRON HELLAS S.A.
G.E.MH. No: 07278001000
Athens Headquarters - Greece
50 - 52, Thrakomakedonon Av.
136 79 Acharnes, Greece
T: +30 210 2448250
F: +30 210 2476803
info@penetron.gr, www.penetron.gr