Floor Systems / Epoxy Floor Primers

REPOX® AE

Solvent-Free Epoxy Surface Primer with Filler

DESCRIPTION

Epoxy resin based; solvent free, double component epoxy **floor primer** with low filler on concrete or cement based mineral surfaces. Can be used as primer under epoxy and polyurethane based coatings.

APPLICATION AREAS

- Indoor and outdoor
- As a primer under the coatings in hygienic environments such as hospitals and laboratories, in food, medicine, dyestuff industries, printing houses, industrial kitchens, airplane maintenance hangars, factories, places where heavy forklift trucks are used, water purification facilities, places exposed to chemical corrosion, warehouses, terminals, shopping malls, schools and parking garages
- As a stripping coat with the addition of aggregate at a ratio of 1/1
- As filler and repair mortar when mixed with appropriate aggregate
- Under **REPOX** epoxy based floor coatings
- As a primer under **POLAN** polyurethane based floor coatings.

TECHNICAL PROPERTIES

Components	A: Epoxy resin, B: Hardener
Color	Cream
Mixture Ratio	A: 20 kg, B: 5 kg
Mixture Density	1.30 ± 0.05 kg/L (20°C TS EN ISO 2811-1)
Viscosity	1800 ± 200 mPas (20°C)
Compressive Strength	70 – 75 N/mm^2 (DIN 53504 TS 1967) 7 days
Bond Strength by Pull-off	> 2 N/mm^2 (EN 1504-2) 7 days
Tensile Elongation	> 8% (DIN 53504 TS 1967) 7 days
Abrasion Resistance (Taber)	< 100 mg, 1000 cycle (EN 1504-2)
Impact Resistance	Class III (EN 1504-2)
Capillary Absorption and Water Permeability	w < 0.1 kg/(m^2. h0.5) (EN 1062-3)
Solid Content (Mixture)	By weight 100%, by volume 100%
Hardness (Shore D)	75 ± 5 (ASTM D 2240, DIN 53505)
Pot Life	40 – 50 minutes (23°C, 200 g, DIN 16945)
Application Temperature	Between +10°C and +30°C
Dirt Pick-up Time	3 – 4 hours (23°C TS 4317)
Dry to Touch Time	8 – 10 hours (23°C TS 4317)
Top Coat Time	For solvent-free coating: max. 24 hours (23°C TS 4317) For solventborne coating: 36 hours (23°C TS 4317)
Complete Curing Time	7 days (23°C TS 4317)

ADVANTAGES

- Does not contain solvent
- Adheres perfectly on cement based surfaces
- Easy to apply in the construction site environment as it is self-filling
- Can be used as filling and repair mortar by mixing with suitable aggregate
- Resistant to chemicals and inorganic acids, has high mechanical strength.

CONSUMPTION

250 – 500 g/m^2 (for 175 - 375 µ thickness) (Varies depending on the absorption and roughness of the surface, and the method of application).

PACKAGING

In tin cans, sets of 25 kg (A+B)

APPLICATION

PREPARATION OF THE SURFACE

- The surface must be free of weakly adhered parts, clear of materials that prevent bonding, such as dust, oil, tar, paint, silicone, curing materials, detergents and mold oils and be rough to improve adhesion. If the surface needs to be repaired, use the appropriate REPOX series repair mortar or REPOX AD by mixing with appropriate aggregates.
- If the application surface is concrete, it must be cured (28 days) and have a minimum compressive strength of 25 N/mm^2 and tensile strength of 1.5 N/mm^2. The humidity of the floor concrete should be maximum 4% and the floor temperature should be at least 3°C above the condensation point.
- It is recommended to impregnate the surfaces with **REPOX A** or **REPOX AE** before REPOX AD application.

MIXTURE

- REPOX AD is packaged as two components in appropriate quantities. First mix each component in itself. Add 5 kg of component B (hardener) to 20 kg of component A (epoxy resin). Mix for 3-4 minutes until a homogeneous consistency is obtained with a drill with a 300 - 400 rpm mixer tip. Take the whole mixture into a clean container and mix again. If a part of the product is to be used, pay attention to the mixing rates.

APPLICATION

- Apply REPOX AD to the floor with a trowel. If necessary, mix REPOX AD with aggregate at a ratio of 1/1 or 1/5 and apply with a trowel at the specified consumption rate.
- Apply the coating on it in 24 hours at the latest.

CAUTION

- Avoid application at temperatures below +10°C and above +30°C.
- Use a suitable drill in mixing REPOX AD, never mix by hand or with a trowel.
- Do not add water, solvent, etc. to the mixture. Do not thin with thinner or similar materials.
- Bring the materials to the application area at least 24 hours before in order for them to adapt to the ambient conditions.
- Working and curing times of epoxy resin-based products depend on the ambient and floor temperature. As the viscosity increases at low temperatures, the amount of consumption also increases. The chemical reaction slows down, thus extending the pot life and working time. At high temperatures, the opposite is true.
- If heating is required in the application area, use only electrical, warm air blowing systems so that it does not affect the surface appearance.
- Avoid applying in frozen areas at risk of freezing within 24 hours, or that are directly exposed to the sun and wind.
- Do not walk on for at least 24 hours after the application. Avoid water contact and condensation 48 hours, otherwise carbonation will occur. In this case, clean the surface with sandpaper and apply a thin coat again.
- After the application is finished, clean the equipment only with cellulosic thinner. Hardened grout can only be removed mechanically.
- The opened package should be consumed within a maximum of 1 week under appropriate storage conditions.

SHELF LIFE

Expires in 12 months. Store unopened packages in a cool, dry environment, protect from sun, between +15°C and +25°C. Protect against freezing.

HEALTH AND SAFETY

As with all chemical products, avoid contact with food, skin, eyes and mouth during use and storage. In case of contact, wash immediately with plenty of water and soap, and if swallowed, consult a doctor immediately. During application, wear work clothes, protective gloves, goggles and masks in accordance with occupational health and safety rules. Do not bring food and beverage into the application areas. Do not approach the storage and application areas with fire. Ventilate the area. Store out of reach of children.