Technical Datasheet

EPOXYCOAT-AC

Two-component, anti-corrosion epoxy primer

Description

EPOXYCOAT-AC is a two-component, colored epoxy system with solvents, offering high strength and abrasion resistance. It is highly resistant to organic and inorganic acids, alkalis, petroleum products, solvents, water, seawater, etc. It offers excellent protection against corrosion to metal surfaces.
Certified according to EN 1504-7 and classified as a product for reinforcement corrosion protection. Certificate No.: 2032-CPR-10.11.

Fields of application

EPOXYCOAT-AC is used as an active anti-corrosion and anti-rust coating on iron and steel surfaces, especially on surfaces to be coated with the epoxy resins EPOXYCOAT-W, EPOXYCOAT-VSF, EPOXYCOAT, and EPOXYCOAT-S.
It can also be used as a stand-alone final coating if its red-brown or grey color is pleasing to the eye. Application examples include protection of silos, steel bridges, fences, iron roofs, pipes, reinforcement bars, etc.

Technical data

Base:	2-component epoxy resin
Colors:	RAL 3009 (red-brown) RAL 7040 (grey) other colors on order
Viscosity:	350 mPa.s at +230C
Density (A+B):	1.40 kg/l
Mixing ratio (A:B):	100:13.5 by weight
Pot life:	approx. 2.5 h at +20°C
Volume solids:	~ 69%
Gloss level: (EN ISO 2813: < 60 at 60°)	7, Satin
Minimum hardening temperature:	+8°C
Walkability:	after 24 h at +23°C
Recoat:	after 3-24 h at +23°C
Final strength:	after 7 days at +23°C
Adhesion strength:	> 3 N/mm^2 (breaking point of concrete)
Shear adhesion (coated steel to concrete): (EN 15184)	Pass *1
Corrosion protection: (EN 15183)	Pass *2
Glass transition temperature: (EN 12614)	≥ 60°C

**1: The test is considered to have been passed if the bond stress determined with the coated bars is in each case at least 80% of the reference bond stress determined for the uncoated bars.*

**2: The test is considered to have been passed if the coated zones of the steels are free of corrosion and if rust creep at the ground plate edge < 1 mm.*

Cleaning of tools:
Tools should be cleaned with SM-25 solvent immediately after use.

Directions for use

1. Substrate
The surface to be coated should be:

- Dry and stable.
- Free of materials that might prevent bonding, e.g. dust, loose particles, grease etc.
- Free of rust or any corrosion that might prevent bonding.

According to the nature of the substrate, it should be prepared by brushing, grinding, sandblasting, etc. Following this, the surface should be cleaned from dust.

2. Mixing of components
Components A (resin) and B (hardener) are packaged in two separate containers, at the correct predetermined mixing ratio by weight. Before mixing, component A is stirred mechanically for 1 min. Then, all of component B is added to component A and the two components are mixed continuously for about 5 min with a low-speed mixer (300 rpm) until a uniform mix is obtained. It is important to thoroughly stir the mixture near the sides and bottom of the container to achieve uniform dispersion of the hardener. To ensure thorough

EPOXYCOAT-AC

mixing, the mixture is poured into a clean container and mixed again for at least 1 min until fully homogeneous.

3. Application - Consumption

a) As a primer
EPOXYCOAT-AC is applied by roller, brush, or spray in two coats. The second coat follows after the first has dried but within 24 hours.
Consumption: 150-200 g/m^2/coat.

Painting with EPOXYCOAT-W, EPOXYCOAT-VSF, EPOXYCOAT, or EPOXYCOAT-S epoxy coatings should follow within the next 24 hours.

b) As a paint
EPOXYCOAT-AC is applied by roller, brush or spray in 3-4 coats. Every next coat follows after drying of the previous one but within 24 hours.
Consumption: 150-200 g/m^2/coat.

Packaging

EPOXYCOAT-AC is supplied in containers (A+B) of 3 kg and 8 kg, with components A and B having the correct, fixed ratio by weight.

Shelf life – Storage

12 months from date of production if stored in original, sealed packaging, in areas protected from moisture and direct sunlight. Recommended storage temperature between +5°C and +35°C.

Remarks

- The workability of epoxy materials is affected by their temperature. The ideal temperature of application is between +15°C and +25°C so that the product will be easy to use and cure as prescribed. Room temperature below +15°C will expand the curing time and temperature above +30°C will accelerate the curing time. In winter time a mild preheating of the product is recommended, while in summer time to store the materials in a cool room before the application.
- EPOXYCOAT-AC contains solvents. In cases of application in closed rooms, measures should be taken for good ventilation.
- Bonding between successive coats may be severely affected by moisture or dirt.
- Epoxy coats should be protected from moisture for 4-6 hours after application. Moisture may whiten the surface or/and make it sticky. It may also disturb hardening. Faded or sticky coats in parts of the surface should be removed by grinding or milling and laid again.
- In case recoat time is longer than predicted or old floors are to be laid again, the surface should be thoroughly cleaned and ground before application of the new coat.
- After hardening, EPOXYCOAT-AC is totally safe for health.
- Consult the directions for safe use and precautions written on the packaging before application.

Volatile organic compounds (VOCs)

According to Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory j, type SB, is 500 g/l (2010) for the ready-to-use product.
The ready-to-use product EPOXYCOAT-AC contains max. 450 g/l VOC.

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2032-CPR-10.11

DoP No.: EPOXYCOAT-AC/1834-01

EN 1504-7

Reinforcement corrosion protection product for uses other than low performance requirements

Shear adhesion: Pass

Corrosion protection: Pass

Glass transition temperature: ≥ 60 °C

Dangerous substances: comply with 5.3

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