

EPOXYCOAT-S

2-component epoxy coating. Ideal for swimming pools

Description

EPOXYCOAT-S is a two-component, colored epoxy system with solvents, offering high hardness and abrasion resistance. It is resistant to acids, alkalis, petroleum products, solvents, water, seawater, etc.

Certified according to EN 1504-2 classified as a coating for surface protection of concrete. Certificate No.: 2032-CPR-10.11. CE marked.

Fields of application

EPOXYCOAT-S is used as a protective and decorative coating on cement-based substrates, including concrete, plaster, cement screeds, etc., and on metal surfaces. Suitable for industrial units, laboratories, slaughterhouses, canned food factories, wine-making factories, gas stations, car repair shops, etc.

Well-suited for painting swimming pools.

Also suitable for food contact surfaces according to W-347, EPA 330.5 and EPA 110.2.

Technical data

Base:	2-component epoxy resin
Colors:	RAL 9003 (signal white), RAL 1013 (oyster white, sand carpet system), Swimming pool blue, and other colors on order
Viscosity:	4,000 ± 500 mPa·s at +23°C
Density:	1.34 kg/l
Mixing ratio (A:B):	100:20 by weight
Pot life:	approx. 80 min at +20°C
Volume solids:	~75%
Gloss level: (EN ISO 2813: < 60, at 60°)	17, Satin
Minimum hardening temperature:	+8°C
Walkability:	after 24 h at +23°C
Recoat time:	after 24 h at +23°C
Final strength:	after 7 days at +23°C
Abrasion resistance: (EN ISO 5470-1)	< 3,000 mg

Capillary absorption and permeability to water: 0.01 kg/m²·h^{0.5}
(EN 1062-3, requirement of
EN 1504-2: w < 0.1)

Resistance to thermal shock: a) No bubbles, cracks or delamination
(EN 13687-5) b) Pull-off test: ≥ 2 N/mm²

Impact resistance: 6 Nm (Class I)
(EN ISO 6272-1)

Adhesion strength by pull-off test (EN 1542): > 3 N/mm²
(breaking point of concrete)

Reaction to fire: Euroclass F
(EN 13501-1)

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

Directions for use

1. Substrate preparation

The surface to be coated should be:

- Dry and stable.
- Free of materials that might prevent bonding, e.g. dust, loose particles, grease, etc.
- Protected from underneath moisture attack.

Also, it should meet the following requirements:

a) Cementitious substrates

Concrete quality: at least C20/25

Cement screed quality: cement content
350 kg/m³

Age: at least 28 days

Moisture content: < 4%

b) Iron or steel substrates

They should be free of rust or dirt that might impair bonding.

According to the nature of the substrate, it should be prepared by brushing, grinding, milling, sandblasting, water blasting, shot blasting, etc. Following this, the surface should be cleaned from dust with a high-suction vacuum cleaner.

EPOXYCOAT-S

2. Priming

a) Cementitious surfaces

Cement-based surfaces are primed with DUROFLOOR-BI epoxy impregnation in one layer or EPOXYCOAT-S diluted (10-20% by weight) with SM-27 special solvent.

Consumption of DUROFLOOR-BI: ~ 150 g/m².

EPOXYCOAT-S should be applied within 24 h from priming, providing it has dried.

b) Surfaces waterproofed with AQUAMAT-ELASTIC

Surfaces waterproofed with AQUAMAT-ELASTIC are primed with the water-based epoxy primer EPOXYPRIMER 500, thinned with water up to 30% by weight. The product is applied by brush or roller in one coat.

Consumption of EPOXYPRIMER 500: 150-200 g/m². EPOXYCOAT-S should be applied within 24-48 h from priming and as soon as moisture content falls below 4%.

c) Metal surfaces

Metal surfaces are primed with EPOXYCOAT-AC anti-corrosion epoxy coating in 2 coats.

Consumption: 150-200 g/m²/coat.

EPOXYCOAT-S should be applied within 24 h from priming, providing it has dried.

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

4. Application - Consumption

EPOXYCOAT-S is used as is or diluted up to 5% by weight with SM-27 special solvent. It is applied by roller, brush or spray in at least 2 coats. The second coat may be applied after the first one has dried but within 24 hours.

Consumption: 200-300 g/m²/coat.

Packaging

EPOXYCOAT-S is supplied in containers (A+B) of 2 kg, 9.6 kg and 28.8 kg, with components A and B at a fixed weight ratio.

Shelf life – Storage

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

Remarks

- The workability of epoxy materials is affected by temperature. The ideal temperature of application is between +15°C and +25°C, for which the product obtains optimal workability and curing time. Room temperature below +15°C will prolong the curing time, while temperatures above +30°C will reduce it. It is recommended to mildly preheat the product in the winter, and store the product in a cool room before application in the summer.
- EPOXYCOAT-S contains solvents. In case of application in enclosed rooms, measures for good ventilation should be taken.
- Bonding between successive coats may be severely affected by moisture or dirt.
- Epoxy layers 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 expected or old floors are to be overlaid, the surface should be thoroughly cleaned and ground before applying the new coat.
- After hardening, EPOXYCOAT-S is totally safe for health.
- Please consult the directions for safe use and precautions written on the packaging before use.

EPOXYCOAT-S

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-S contains a maximum of 500 g/l VOC.



2032

ISOMAT S.A.

17th km Thessaloniki – Ag. Athanasios
P.O. BOX 1043, 570 03 Ag. Athanasios, Greece

12

2032-CPR-10.11

EN 1504-2

Surface protection products
Coating

DoP No.: EPOXYCOAT-S/1822-01

Abrasion resistance: < 3,000 mg

Capillary absorption: $w < 0.1 \text{ kg/m}^2 \cdot \text{h}^{0.5}$

Resistance to thermal shock: $\geq 2.0 \text{ N/mm}^2$

Impact resistance: Class I

Adhesion: $\geq 3.0 \text{ N/mm}^2$

Reaction to fire: Euroclass F

Dangerous substances comply with 5.3

ISOMAT S.A.

BUILDING CHEMICALS, MORTARS & PAINTS

HEADQUARTERS – THESSALONIKI, GREECE

17th km Thessaloniki – Ag. Athanasios Road

P.O. BOX 1043, 570 03 Ag. Athanasios, Greece

T +30 2310 576000

www.isomat.eu e-mail: support@isomat.eu