

## 2-component, water based epoxy coat

### Description

EPOXYCOAT-W is a 2-component, colored epoxy system without solvents. It offers high strength and abrasion resistance. It is resistant to acids, alkalis, petroleum products, water and sea water.

It is ideal for applications in indoor areas and, in general, in cases where solvents are undesirable.

It is certified with the CE marking and classified as a coating for surface protection of concrete, according to EN 1504-2. Certificate Nr. 2032-CPD-10.11.

### Fields of application

EPOXYCOAT-W is used as a protective and decorative coating on cement-based substrates, e.g. concrete, plaster, cement-mortars, as well as on metallic surfaces. It is suitable for industrial rooms, laboratories, slaughter-houses, canned food factories, wine factories, gas stations, car repair shops etc. It is also suitable for surfaces in direct contact with food products, according to W-347, EPA 330.5 and EPA 110.2.

### Technical data

Basis:	2-component epoxy resin
Colors:	RAL 7035 (light grey) RAL 1015 (beige), other colors after special order
Viscosity:	4.200 mPa.s at + 230C
Density:	1,32 kg/lit
Mixing proportion (A:B):	100:23 by weight
Pot life:	approx. 90 min at + 20°C
Minimum hardening temperature:	+ 8°C

Walkability:	after 24 h at + 23°C
Successive layer:	after 8 h to 48 h at + 23°C
Final strength:	after 7 days at + 23°C
Abrasion resistance: (EN ISO 5470-1)	< 3000 mg
Capillary absorption and permeability to water: (EN 1062-3, requirement of EN 1504-2: w < 0,1)	0,01 kg/m <sup>2</sup> ·h <sup>0,5</sup>
Resistance to thermal shock (EN 13687-5, rigid systems, at 70°C):	No bubbles, cracks or delamination
	Pull-off test ≥ 2 N/mm <sup>2</sup>
Impact resistance: (EN ISO 6272-1)	5 Nm (Class I)
Adhesion strength by pull off test (EN 1542):	> 3 N/mm <sup>2</sup> (breaking point of concrete)
Reaction to fire: (EN 13501-1)	Euroclass F
Cleaning of tools:	Tools should be cleaned with water, immediately after use.

### Directions for use

#### 1. Substrate

The surface to be coated should be:

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

Also, it should meet the following requirements:

# EPOXYCOAT-W



## a) Cementitious substrates

Concrete quality: at least C20/25  
Cement screed quality: cement content  
350 kg/m<sup>3</sup>  
Age: at least 28 days  
Moisture content: less than 4%

## b) Iron or steel substrates

Should be free of rust or any dirt that prevents bonding.

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

## **2. Priming**

### a) Cementitious substrates

Cement-based surfaces are primed using EPOXYCOAT-W diluted with water up to 20% by weight.

Consumption of EPOXYCOAT-W: approx. 150 g/m<sup>2</sup>.

### b) Metallic substrates

Metallic substrates are primed using EPOXYCOAT-AC anti-corrosive epoxy coating in one or two layers.

Consumption EPOXYCOAT-AC: approx. 150 g/m<sup>2</sup>/layer.

## **3. Mixing of EPOXYCOAT-W**

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing proportion by weight. The whole quantity of component B is added into component A. Mixing of the 2 components should take place for about 5 minutes, using a low revolution mixer (300 rpm). It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener.

## **4. Application - Consumption**

EPOXYCOAT-W should be applied within 48 hours after priming and after the primer has dried.

It is applied by roller, brush or spray in 2 layers minimum.

The first layer of EPOXYCOAT-W is used as it is or diluted with water up to 10% by weight.

The second coat follows after drying of the first, but within 48 hours.

Consumption: 150-250 g/m<sup>2</sup>/layer.

### **Packaging**

EPOXYCOAT-W is supplied in packages (A+B) of 3 kg and 9 kg, with components A and B having the fixed weight proportion.

### **Shelf-life - Storage**

24 months from production date if stored in original, unopened packaging, in temperature between +5°C and +35°C. Protect from direct sun exposure and frost.

### **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.
- Bonding between successive layers may be severely affected by the intervention moisture or dirt.



# EPOXYCOAT-W



- In case that longer time than predicted interferes between the application of successive layers or in case that old floors are going to be laid again, the surface should be thoroughly cleaned and ground before application of the new layer.
- Before application, study the safety advice mentioned on the product's labels.

## Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory j, type WB is 140g/l (2010) for the ready to use product.

The ready to use product EPOXYCOAT-W contains max <140 g/l VOC.



2032

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12

2032-CPD-10.11

EN 1504-2

Surface protection products

Coating

Abrasion resistance: < 3000 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 strength:  $\geq 3,0 \text{ N/mm}^2$

Reaction to fire: Euroclass F

Dangerous substances comply with 5.3

### ISOMAT S.A.

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