



Two-component epoxy resin for self-levelling industrial floor coatings and multilayer sealing applications

DESCRIPTION

EP Coat 100 is a two-component, 100% solids, pigmented epoxy binder specifically designed for the application of thin-layer epoxy coatings, either self-levelling or anti-slip multilayer systems.

It is easy to apply by roller, rubber trowel, or notched trowel, and provides excellent self-levelling properties. Ensures full aggregate coverage in multilayer systems.

CERTIFICATIONS

- Reaction to fire classification Bfl-s1, No. 26AN0899. AITEX. According to standard EN 13501-1:2018.

APPLICATION

Multilayer protective coating for heavily used concrete floors, in all kinds of indoor areas:

- Industrial flooring
- Poorly ventilated areas.
- Parking decks.
- Warehouses.
- Shops.

This material can be used as a primer and as a component of all the steps in a multilayer system. Also suitable as a self-levelling flooring resin. The different available option depends on the application choices, fillers and the pigmentation options.

TECHNICAL DATA

INFORMATION ON THE PRODUCT BEFORE APPLICATION

	Component A	Component B
Chemical description	Epoxy resin	Polyamine mixture
Physical state	Liquid	Liquid
Packaging	Metal container 20 kg	Metal container 5 kg
Non-volatile content	>95%	98%
Flash point	>120°C	>100°C
Colour	Pigmented	Colourless
Density	1,57 g/cm ³ 25°C	1,05 g/cm ³ 25°C
Viscosity	4780 mPa.s 25°C	184 mPa.s 25°C
VOC	<10 g/L, <2%	20 g/L, <2%
A/B mixing ratio	A=100, B=25 by weight	
Mixture properties	1,45kg/l 23°C	
Pot life	+10°C 35 min +23°C 25 min	
Storage and Shelf Life	Store for up to 6 months from the date of manufacture in original, unopened and undamaged containers, kept in a dry place at temperatures between +10 °C and +30 °C. Do not store in areas where temperatures fall below +10 °C, as this may cause crystallization issues.	

INFORMATION ON THE FINAL PRODUCT

Final state	Rigid, glossy, homogeneous material
Colour	Pigmented. Available colours are RAL 1003, 1014, 2010, 3002, 3009, 5015, 5017, 6002, 7001, 7004, 7011, 7035, 8024, 9005, 9003. Other colours under request.
Hardness (Shore)	80D (ISO 868)
Solid contents	100% solids by weight and volume
Fire behaviour	Bfl-s1 EN 13501-1
Impact resistance	≥ 14,7 Nm EN-ISO 6272-1

BCA abrasion resistance	50 µm AR 0'5 EN 13892-4
Tensile adhesion Strength	≥ 3,8 N/mm ² B 2'0 EN 13892-8
VOC content	95,9 g/l

CHEMICAL RESISTANCE

Permanent contact (3 days, 80°C):

Chemical	% weight gain
Water	0
Methoxypropyl acetate	5
Isopropyl alcohol	5
Skydrol	0
Xylene	3
Ammonia (3%)	0
Acetone	25
Diesel	0
Hydrogen peroxide	0
Sodium hydroxide (40 g/L)	0
Bleach	2
Sulphuric acid (10%)	0
Sulphuric acid (30%)	0
Sulphuric acid (50%)	0
Acetic acid (10%)	2

Surface contact (24h, room temperature, 5=ok, 0=not recommended):

Chemical	Result
Water	5
Ethyl alcohol	5
Engine oil	5
Vinegar	5
Hydrogen peroxide	5
Sulphuric acid (10%)	5
Sulphuric acid (30%)	5
Sulphuric acid (50%)	4
Isopropyl alcohol	4
Xylene	5
Ammonia (3%)	5
Diesel	5
Methoxypropyl acetate	4
Acetic acid (10%)	5
Bleach	5
Sodium hydroxide (40 g/L)	5
Acetone	3
Skydrol	5

SUBSTRATE PREPARATION

Substrate Quality. Compressive strength must be at least 25 N/mm² and tensile strength no less than 1.5 N/mm².

Concrete surfaces should be prepared by mechanical means (shot blasting, grinding, or scarifying) to achieve an open-pore, textured surface.

The substrate must be clean, dry, and free of all contaminants and loose materials such as dust, grease, oils, old coatings, etc. A preliminary test is recommended if any doubts arise. All dirt, loose, or poorly adhered parts must be removed prior to product application.

Ensure the formation of a continuous, pore-free layer by applying a prior primer coat of EP Coat 100. Rough surfaces should be levelled before application.

ENVIRONMENTAL CONDITIONS

- Substrate moisture content: max. 4%
- Substrate temperature: min. +10 °C / max. +30 °C
- Ambient temperature: min. +10 °C / max. +30 °C
- Relative humidity: max. 80%
- Dew point: Ambient and substrate temperatures must be at least 3 °C above the dew point during application to avoid condensation risk. Low temperatures combined with high humidity increase the likelihood of blister formation.



KRYPTON CHEMICAL SL

C/ Martí i Franquès, 12 - Pol. Ind. les Tàpies
43890 - l'Hospitalet de l'Infant - Spain
Tel: +34 977 822 245 - Fax: +34 977 823 977

www.kryptonchemical.com - rayston@kryptonchemical.com



Two-component epoxy resin for self-levelling industrial floor coatings and multilayer sealing applications

MIXING OR HOMOGENIZATION

The product is supplied as a liquid in two components, A and B.

The components are provided in the correct mixing ratio and must always be mixed accordingly. Special attention should be paid to thoroughly incorporate any hardener residue adhering to the sides and bottom of the container.

Mix mechanically and slowly to avoid air entrapment, using a low-speed mixer or drill with a mixing paddle at 300–400 rpm for approximately 1 to 2 minutes, until a homogeneous blend is achieved.

APPLICATION

Pure resin is applied using a roller or rubber squeegee. When combined with aggregates, the use of a metal trowel may be required. For light-coloured finishes, more than two coats may be necessary depending on the base colour to achieve full opacity. RAL colours 1003, 1014, 2010, 3002, and 9003 require a minimum consumption of 600 g/m², typically applied in multiple layers.

The mixture must be applied immediately after preparation. It is important to note that the pot life is approximately 25 minutes at 23 °C, depending on ambient conditions. Due to the exothermic reaction, the pot life will decrease as more material remains in the container.

CURING TIME

Substrate temperature	Product ready for use after application		
	Ready for use	Light traffic	Fully cured
+10°C	36 hours	4 days	8 days
+ 23°C	24 hours	2 days	6 days

RECOATING

A second coat can be applied after 24 hours from the first coat.

Substrate temperature	Overcoating interval	
	Minimum	Maximum
+10°C	24 hours	3 days
+ 23°C	12 hours	36 hours

Once applied, EP Coat 100 must be protected from moisture, condensation, and water for at least the first 24 hours. Avoid standing water on the surface during the first 7 days after application.

Special care must be taken not to apply the product at relative humidity levels above 80% or on substrates with rising moisture. Exceeding these limits may lead to curing issues.

If application is expected at temperatures below +10 °C, it is advisable to apply a sealing coat of Colodur ECO within 24 hours.

The use of solvents may alter the original colour tone.

FAQ

Problem	Cause
Reaction is too fast. Short pot life.	Too much product mixed If mixed in smaller volumes or the mixture is spreader as soon as it is ready, pot life will be longer.
Can it be diluted?	Viscous product Yes, with Rayston Solvent, not exceeding 5% of component A.

CLEANNIG TOOLS

Tools and equipment must be cleaned immediately after use with xylene. Hardened material can only be removed by mechanical means.



SAFETY

The epoxy components of Part A have sensitizing potential, and Part B in its unreacted form is corrosive. Always follow the instructions provided in the product's Safety Data Sheet (SDS) and implement the recommended protective measures. Adequate skin and eye protection are mandatory.

This product must be used only for its intended applications and as prescribed. It is intended solely for industrial and professional use and is not suitable for DIY (do-it-yourself) applications.

ENVIRONMENT

Empty containers must be handled with the same precautions as full ones. Containers should be treated as waste and disposed of through an authorized waste management service.

If containers contain residues, do not mix them with other products without first ruling out any dangerous reactions.

Residuals of Part A and Part B can be mixed to form an inert solid material but never mix volumes exceeding 5 liters at a time to avoid hazardous heat generation.

OTHER INFORMATION

The information contained in this DATA SHEET, as well as our advice, both written as verbal or provided through testing, are based on our experience, and they do not constitute any product guarantee for the installer, who must consider them as simple information.

We recommend studying deeply all information provided before proceeding to the use or application of any of our products and strongly advise to conduct tests "on-site" in order to determine their convenience for a specific project.

Our recommendations do not exempt of the obligation of installers to deeply study the right application method for these systems before use, as well as to conduct as many preliminary tests as possible should any doubt arise.

The application, use and processing of our products are beyond our control, and therefore under the exclusive responsibility of the installer. In consequence, the installer will be the only responsible of any damage derived from the partial or total in-observation of our indications, and in general, of the inappropriate use or application of these materials.

This data sheet supersedes previous versions.