

Food-grade epoxy coating

DESCRIPTION

Epoxy coating, pigmented, for general surface protection in food-contact environments. Designed as a general purpose product for food industry, from multilayer systems to topcoat applications. Compliant with overall migration limits set in Regulation (EC) No. 10/2011 for neutral (non acidic) and dry foods. Available in two versions, for manual and airless spray application

APPLICATION

Food grade flooring topcoats
Container lining for neutral aqueous and dry food products, simulants A, C, D2 and E as described in Regulation (EC) 10/2011.
Examples include:
Hydrophilic, not acid, food materials. e.g. Honey, vegetables, fish, meat.
Alcoholic below 20%. e.g. water, juices, wine
Dry foodstuffs. e.g. dehydrated food, nuts, sugar

BENEFITS

Hard, resistant coating

CERTIFICATION

Migration test by Eurofins Consumer Product Testing GmbH (Germany). Reports AR-15-JR-009695-01 and AR-17-JR-013890-01

TECHNICAL DATA

BEFORE APPLICATION		
	Component A	Component B
Chemical description	Epoxy resin	Polyamine
Physical state	Liquid	Liquid
Packaging	Plastic container	Metal container
	12 kg	3.2 kg
Non-volatile content	99%	100%
Flash point	138°C	>130°C
Colour	Variable	Colourless
Density	1,46 g/cm ³	1,10 g/cm ³
Viscosity	Version 1	Both versions
Approximate Brookfield 25°C	(manual application) 3000-5000 mPa.s	150-300 mPa.s (25°C)
	Version 2	
	(spray application) 15000-25000 mPa.s	
Mixing ratio	A=100, B=27 by weight A=100, B=36 by volume	
Mixture properties	Density: 1,3 g/cm ³ Viscosity : 2000 mPa.s (version 1) 5000-10000 (version 2) Colour variable according to pigments and product version	
Pot life	30 min (25°C)	
Storage and expiration	Keep at temperature below 35° and above 10° Use before: 12 months after manufacturing date	

FINAL PRODUCT

Final state	Hard coating
Colour	Variable, according to pigmentation Version 1 (manual application) available in red, beige, blue, white, gray Version 2 (spray application) available in gray

Hardness (Shore) (ISO 868)	>78D
Solid density	1.30 g/cm ³
Mechanical properties	Elongation <5% (EN-ISO 527-3)
Gloss (60°)	95%
Adhesion	Concrete: 7 MPa (substrate failure)
Chemical resistance	Immersion test, 7 days, 80°C (5= best, 0= worst)

	Result
Water	5
Xylene	4
Sodium hydroxide 40g/L	5
Skydrol	5
Tetrahydrofuran	0
Isopropanol	2
Petrol	3
Ammonia 3%	5
Acetic acid 10%	0
Bleach	5
Methoxypropyl acetate	2
Sulphuric acid 10%	2
Sulphuric acid 30%	2
Sulphuric acid 50%	0

Surface contact, 48 h, rt (5= best, 0= worst)

	Result
Water	5
Xylene	5
Sodium hydroxide 40g/L	5
Skydrol	5
Tetrahydrofuran	1
Isopropanol	3
Petrol	4
Ammonia 3%	5
Acetic acid 10%	0
Bleach	5
Methoxypropyl acetate	4
Sulphuric acid 10%	0
Sulphuric acid 30%	0
Sulphuric acid 50%	0
dibutylamine	2
Beer	5
Hydrochloric acid 25%	2
Diesel	5

Water absorption <2%

SUPPORT REQUIREMENTS

In order to achieve a good degree of penetration and bonding, support must be:

1. Flat and leveled
2. Compact and cohesive (pull off test must show a minimum resistance of 1,4 N/mm²).
3. Even and regular surface
4. Free from cracks and fissures. If any, they must be previously repaired.
5. Clean and dry, free of dust, loose particles, oils, organic residues or laitance.

AMBIENTAL CONDITIONS

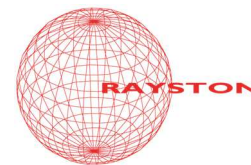
Support temperature must be 3°C above dew point at least. Air temperature should be above 5°C and relative humidity less than 80%.
Maximum application temperature is 40°C.
Best conditions are 10°C-30°C. These conditions should be maintained along all the curing time. Application should be done with plenty of air ventilation

SUPPORT PREPARATION

Concrete surfaces must be previously prepared by sandblasting or any other suitable means. Remove all dust and loose material before priming.

MIXING

Stir and homogenize thoroughly component A and B using a low-speed stirrer. The mixture turns to a homogenous liquid.



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APPLICATION

Manual version can be applied by roller

Airless spray version is to be applied according to the following guidelines.

Pump: Graco Mark V or equivalent

Nozzle diameter: 0.53 mm

Nozzle pressure: 150-180 bar

Output: 1.8 L/min

Spray angle: 50° at 30cm

Spray fan width: 25 cm

CONSUMPTION

200 to 300 g/m² each coat.

CURING TIME

Temperature (°C)	Touch dry (h)
20	18

RETURN TO SERVICE

Traffic is allowed 24 to 48 hours after application

TOOL CLEANING

Use Rayston Solvent.

SAFETY

Component A is an epoxy resin. Epoxy components are potentially sensitizing. Always follow instruction provided in the Material Safety Data Sheet. As a general rule, suitable skin and eye protection must be worn. This product is intended to be used only for the uses and in the way here described. This product is to be used only by industrial or professional users. It is not suitable for DIY-type uses.

ENVIRONMENTAL PRECAUTIONS

Empty containers must be handled with the same precautions as if they were full. Treat empty containers as hazardous waste, and transfer them to an authorized waste manager. If the containers still have some material left, do not mix with other product before considering the risk of potential dangerous reactions. Never mix in volumes larger than 5 litres in order to prevent a dangerous heat evolution.

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 to study 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.