

Water-based epoxy coating for multilayer applications

DESCRIPTION

Two-component water-based epoxy coating for flooring protection, suitable for multilayer resin systems on concrete floorings. Impervious to liquid water but permeable to vapour, it allows adequate substrate transpiration, preventing water accumulations and blisterings. It is delivered as a pre-dosed kit, and ready to mix and use.

APPLICATION

Multilayer coating, easy to apply, for all kind of indoor areas. It can be applied even in slightly moist surfaces or where some residual moisture remains.

- Industrial floorings
- Poorly ventilated areas
- Parking decks
- Warehouses
- Retail shops

Recommended topcoats: EP Aquacoat

CERTIFICATIONS



TECHNICAL DATA

INFORMATION ON THE PRODUCT BEFORE APPLICATION

	Component A	Component B														
Chemical description	Water-based polyamine hardener	Modified epoxy resin														
Physical state	Liquid	Liquid														
Packaging (A+B pre-dosed kit)	Plastic container 10 kg	Metal container 3 kg														
Non-volatile content (%)	45%	100%														
Flash point	>120°C	>120°C														
Colour	Brown	Colourless, slightly yellow														
Density	<table border="1"> <thead> <tr> <th>Temp (°C)</th> <th>Density (g/cm3)</th> </tr> </thead> <tbody> <tr> <td>23</td> <td>1.00 (clear)</td> </tr> </tbody> </table>	Temp (°C)	Density (g/cm3)	23	1.00 (clear)	<table border="1"> <thead> <tr> <th>Temp (°C)</th> <th>Density (g/cm3)</th> </tr> </thead> <tbody> <tr> <td>25</td> <td>1,14</td> </tr> </tbody> </table>	Temp (°C)	Density (g/cm3)	25	1,14						
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VOC (VOC class as per 2004/42 EC)	<25g/L, <0,5%	<2 g/L, 0,5%														
Mixing ratio A/B	A=100, B=30 by weight A=100, B=26 by volume															
Mixture properties	1,05 g/cm3 at 23°C 100-200 mPa.s a 23°C Colour: brown Non-volatile content: 58-60%															

Pot life

Approximate	Temperature (°c)	Pot Life (100 g/min)
	20	90

Storage

Keep at temperatures between 10°C and 30°C. Frost sensitive. Use before 12 months after manufacturing date.

Component B may crystallize if stored for protracted periods under certain conditions. If this occurs, it can be restored to its original condition by heating it to 70 - 80 °C and stirring it thoroughly.

INFORMATION ON THE FINAL PRODUCT

Final state	Rigid, rough, uniform film
Colour	Colourless
Hardness Shore	65D
Film density	1.0 g/cm ³
UV resistance	This product can change colour slightly under sunlight, with no impairment of its mechanical properties.
Adhesion	Surface: Concrete Adhesion (m.Pa): 2.9
Use temperature	Stable up to 80° C

SUPPORT REQUIREMENTS

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

1. Flat and leveled (product is self-leveling)
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

Application must be done at support temperatures 3°C above dew point. Air temperature must be above 5°C and relative humidity below 80%. Application temperature must be less than 40°C. Optimal temperature range is 10°C- 30°C. These temperatures must be constant throughout drying process. 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 PROCEDURES

Stir and homogenize thoroughly component A and B using a low-speed stirrer. The mixture turns to a homogenous and fluid milky solution. Water (3% to 5%) may be added if deemed necessary for ease of application. Do not mix more material than the amount usable within the pot life window

APPLICATION AND RECOMMENDED AMOUNTS

For the multilayer system dcribed above:

First coat: Roller or rubber squeegee, 400 g/m²
Second coat: Toothed spreader (2 mm gap), spike roller, 3 kg/m²
Last coat: rubber squeegee, 600 g/m²

For more specific details, please consult Krypton Chemical

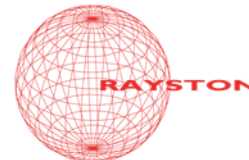
CURING TIME

Applications 400 g/m² thick, 20°C, 50% rh.

- Dry touch: 8-12 hours
- Light traffic: 24-48 hours
- Total cure: 7 days

REAPPLICATION

A second application may be done when the first one is dry to touch, and always within the first 24 hours



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RETURN TO SERVICE

The applied coating is resistant to light traffic in the first 24-48 hours, depending on ambient conditions. Maximum hardness is achieved after 7 days.

TOOL CLEANING

Cleaning of tools contaminated with both components can be done with water, before hardening.

SAFETY

Epoxy components of component B are potentially sensitizing. Component A is irritant. Always follow instructions 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 Technical 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 Technical Data Sheet supersedes previous versions.