



Water-based epoxy coating

DESCRIPTION

Two-component epoxy coating suitable for concrete floorings. Impervious to liquid water but permeable to vapour, it allows an adequate substrate transpiration, preventing water accumulations and blistering. It is delivered as a pre-dosed kit, pigmented and ready to mix and use. An unpigmented version for customer pigmentation is also available on request.

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:

- Interior tunnel surfaces
- Industrial floorings
- Poorly ventilated areas
- Parking decks
- Warehouses

CERTIFICATIONS

Classification of reaction to fire according to standard EN 13501-a:2007 (Aitex. Cert. No 2016AN2375)

CE Marking: EN 13813 Bfl-SR-B4,0-AR0,5-IR14,7.



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	Plastic container 21.4 kg 4.3 kg	Metal container 3.6 kg 0.7 kg
Non-volatile content	57%	100%
Flash point	>120°C	>120°C
Colour	Pigmented	Colourless, slightly yellow
Density	Temperature (°C) 25	Density (g/cm³) 1.35
	Temperature (°C) 25	Density (g/cm³) 1.14
Viscosity	Temperature (°C) 25	Viscosity (mPa.s) 1800
	Temperature (°C) 25	Viscosity (mPa.s) 170
VOC (VOC class as per 2004/42 EC)	<25g/L, <0,5%	
Mixing ratio A/B	A=100, B=17 by weight A=100, B=21 by volume	
Mixture properties	1,30 g/cm³ at 23°C 800-1000 mPa.s a 23°C Colour: pigmented or clear brown when unpigmented Non-volatile content: 63%	
Pot life	Temperature (°C) 5 20 35	Pot life (100 g/min) 200 150 100

Storage Keep at temperatures between 10°C and 30°C. Frost sensitive. 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.

Use before 12 months after manufacturing date

Notes Unpigmented version is also available with the following properties:
Mixture colour: clear brown
Mixing ratio (before post-pigmentation):
A=100, B=18 by weight
A=100, B=22 by volume
Packaging:
A: Plastic container, 20 kg/3,95 kg
B: Metal container, 3,6 kg/ 0,7 kg

INFORMATION ON THE FINAL PRODUCT

Final state	Rigid, uniform film, semi-glossy																												
Colour	Pigmented. Available colours are RAL 1003, 1014, 2010, 3002, 3009, 5015, 5017, 6002, 7001, 7004, 7011, 7035, 8024, 9005, 9003. Other colours or unpigmented (neutral) versions available under request.																												
Hardness (Shore)	65D																												
Film density	1,4 g/cm³																												
UV resistance	This product can change colour slightly under sunlight, with no loss of its mechanical properties.																												
Adhesion	Surface: Concrete Adhesion (MPa): 4.0																												
Use temperature	Stable up to 80° C																												
Slip resistance	With quartz sand spreaded onto (0,4-0,9 mm) at 1 kg/m³: class 3 as per UNE EN 12633-2003 With quartz sand spreaded onto (5% 0,1-0,3 mm): (Class 2, R _a =37), according to UNE 41901 EX:2017																												
Fire classification	Bfl s1 (EN 13501-1:2007)																												
Chemical resistance	Superficial contact, 24 hours, 25°C (5=ok, 0=not recommended)																												
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SUPPORT REQUIREMENTS

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.



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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 (up to 10%) 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

Use brush, roller, or airless spraying equipment. Usual consumption is 250 g/m² for each coat. If diluted with water, use same amount for each can prevent colour variations. Colours as RAL 1003, 1014, 2010, 3002 and 9003 will have a consumption of 600 g/m², usually applied in several layers.

CURING TIME

Conditions	Touch dry (h)
35°C, 25%rh	2
35°C, 10% rh	2
20°C, 10% rh	10
20°C, 40%rh	15
20°C, 90%rh	20
5°C, 50% rh	48
5°C, 20% rh	30
5°C, 80% rh	60

REAPPLICATION

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

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. Caution: contact with water when not fully cured may lead to white stains.

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 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 CONDITIONS

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 contains still have some material left, do not mix with other product before considering the risk of potentially dangerous reactions. Never mix in volumes larger than 5 liters.

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" 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.