



DESCRIPTION

Tecnocem is a cementitious epoxy system for use as a support preparation layer, composed of epoxy components and inorganic reactive fillers.

PROPERTIES

- Good adhesion to a wide range of construction materials even moist, and green concrete.
- Forms an efficient counterpressure water barrier.
- Provides waterproof support, with good water vapour permeability.
- It can be coated with a range of finishing products.
- Suitable for indoor applications (solventless product).

APPLICATIONS

- Base layer for protection of concrete supports.
- Treatment of concrete surfaces for better adhesion of protective, anticorrosive, resilient and waterproof coatings.
- Treatment of moist concrete surfaces for better adhesion of synthetic resin floorings.
- Treatment of moist walls to ensure adhesion of waterproofing coatings.
- Encapsulation and consolidation treatments on fireproof and insulation coatings.
- Surface repairing prior to application of self-levelling products.
- Surface treatment and waterproofing of industrial water systems (fire water tanks, piping, etc).

CERTIFICATIONS

CE Marking. EN 13813 Efl-SR-B4,0-AR0,5-IR14,7. DoP 16-950



TECHNICAL DATA

INFORMATION ON THE PRODUCT BEFORE APPLICATION

	Component A	Component B	Component C
Chemical description	Waterbased polyamine hardener	Modified epoxy resin	White cement composition
Physical state	Liquid	Liquid	Solid dust
Packaging	Plastic container 9.62 kg	Metal container 2.88 kg	Paper sack 25 kg
Flash point	>120°C	>120°C	n.a.
Colour	Amber	Colourless or slightly yellow	Gray
Non-volatile content	45%	100%	100%
Density	1.0 g/cm ³ (23°)	1.14 g/cm ³ (25°)	1.3 g/cm ³
Viscosity	50 mPa.s (20°C)	150 mPa.s (20°C)	n.a.
VOC content	<25 g/L, <0.5%	<2 g/L, 0.5%	n.a.
Mixing ratio	A=100, B=30 C=250 by weight A=100, B=26 C=200 by volume		
Mixture density	1.8 g/cm ³		
Mixture properties	Colour: cream Non-volatile content: 86%		
Pot life	10 minutes (27°C)		
Storage	Keep between 10° 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.



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

INFORMATION ON THE FINAL PRODUCT

Final state	Hard, rigid slab
Colour	Off white, gray
Hardness (Shore)	80D
Water permeability	>100 g/m ² /d (UNE-ISO 7783-2, 200 microns)
Adhesion strength	>3,5 MPa
Counter pressure resistant	ca 10 bar ASTM D4541 1000 kPa, 72 h, at 2 kg/m ² thick. (UNI 8298-8)

SUPPORT REQUIREMENTS

Concrete surfaces must be previously prepared by scarifying or any other suitable means to obtain a rugged and clean surface. Remove all dust and loose material before using. Concrete strength must be >1,5 MPa. Cut suitable joints spaced along the concrete slab depending on the total surface to be covered, and along all the edges.

MIXING

Tecnocem is a 3-component ready to use.

1. Mix component A for 30 seconds.
2. Pour component B and mix for 2-3 minutes.
3. Once a homogeneous A-B-water is obtained, in a slowly way add component C and stir until a uniform, free of slumps, paste is obtained. The product is ready for application.
4. If desired, depending on the application tools used, dilute the product with extra water (add 2 litres by kit).

APPLICATION

Tecnocem can be applied by brush, roller, or spreader. Depending on the intended use, the product can be applied as such, diluted with water or mixed with fillers (quartz sand (0,3-0,6 mm). Dilutions and addition of fillers must be done after mixing all three components.

Avoid application on very wet, soaked, surfaces. The purpose of Tecnocem is to provide a regular smooth support that offers protection against water pressure.

Tecnocem, when applied on wet walls, or in the presence of capillary water pressure, forms a vertical barrier where many different coatings can be applied onto.

On regular and not very wet surfaces, a diluted coat (approx. 3-10 liters by kit) of Tecnocem is normally suitable (total consumption 1 kg/m² each coat)

On very porous surfaces it is advised to apply a diluted coat of Tecnocem on the support and wait 2 hours before resuming work with further Tecnocem application.

On irregular supports, consumption can increase up to 1,5 kg/m², with less water dilution required. When considering a 2 mm thickness on very irregular supports, use the material without dilution, with an expected consumption of 1 kg/m² to 3 kg/m².

On very wet surfaces, with water counter pressure, always apply, after the initial coat, a final Tecnocem coat, by roller, at 500 g/m².

No treatment with Tecnocem must be coated before 48 hours after application (at 20°C, 60° rh) or before a perfect cure is observed (check with appropriate means). If humidity is higher or unfavourable conditions are present, wait at least 6 days.

Expected consumption: 2 kg/m².

Cemetitious epoxy

CURING TIME

Conditions	Curing time
22°C, 50% rh	touch dry: 1-2 h Rain proof: 9-12 h Recoatible: 48 h minimum Final cure: 10 days minimum

RETURN TO SERVICE

Final cure requires 10 days, approx.

QUESTIONS AND ANSWERS

Can it be thickened?

- Yes, for vertical application, use a 2-3% of thickening additive can be added to the total.

TOOL CLEANING

Use water before curing.

SAFETY

Component B contains epoxy components. 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 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 potentially dangerous reactions. Never mix in volumes larger than 5 litres 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 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.