

MONNELI EPOCHIM K100

High Chemical Resistant Epoxy Coating

Product Description

A two component 100% solid, epoxy coating suitable for concrete protection in aggressive chemical conditions like industrial pavements, reinforced concrete, process plants and sewage works. Once it is cured, the product transforms into a continuous anti dust membrane that is resistant against chemicals, and abrasion.

Uses

EPOCHIM K100 is used as follows:

- A resistant coating against chemicals. It also acts as an abrasion protective coating for floors and walls and aggressive products, stored in concrete tanks
- As an abrasion and chemical resistant coating in seawater tanks, sewage works, manholes and pipe linings
- Due to its smooth and easily cleaned surface, EPOCHIM K 100 is especially suited for wet rooms of all types, abattoirs, dairies and agricultural buildings, etc.

Advantages

- Ecofriendly, low VOC
- Excellent adhesion to concrete, wood, stoneware, etc.
- High chemical and abrasion resistance
- Easy applied by brush, roller or spray
- Acts as a protective and waterproof coating

Instructions for Use

Surface Preparation

The surface must be perfectly clean, solid, sound, uncontaminated, free from oil, grease, old friable varnish, etc. The substrate must be rough in order to achieve maximum adhesion with the coatings.

Preparations using mechanical methods like grinding or blasting in order to provide a suitable clean surface is strongly recommended. All necessary repairs should be made prior to application by using one of COLMEF's range of epoxy mortars. Contact Colmef Technical Department for advice.

New concrete or cementitious surfaces should be at least 28 days old and have moisture content not exceeding 5%. Old or existing floor should be refurbished mechanically to ensure clear sound substrate.

On existing epoxy coating, the application of EPOCHIM K 100 can lead to wrinkling and peeling. It is recommended that tests are made to assure the adhesion of old coat to the substrates, otherwise this coating should be removed prior to application of EPOCHIM K 100.

Priming

In general cases properly prepared concrete does not require any priming. Highly porous surfaces, should be primed with PRIMER POXY FF before applying EPOCHIM K 100.

Mixing

EPOCHIM K 100 is composed of two components that are mixed at the moment of use. Pour component B (hardener) into component A (resin) and mix carefully with a drill at low number of turns (200-300 turns per minute), till obtaining a homogeneous consistency.

Application

Apply EPOCHIM K 100 mixture with a brush or roller in two crossed coats at a rate of 4-5 m² / liter per coat. The first coat is applied to achieve a uniform coating with minimum wet coat thickness of 200 microns. The second coat can be applied after making sure that the first one is completely dry and within maximum time of 24 hours from first coat application. The two coats must achieve minimum thickness of 400 microns

If slip resistance finish is required, broadcast the Quartzo silica sand with the required sieve size onto the first coat while it is still wet. Once cured, remove excess sand and apply the final coat.

Cleaning

All tools used in the preparation and application of EPOCHIM K 100 must be cleaned with SOLVENTE 10 before hardening. Hardened material should be removed mechanically.

Recommendations

- Partial mixing of the product components should not be allowed under any conditions
- Extra care should be taken when applying at high temperature as pot life of the mixed product will shorten automatically
- It is recommended to shade the working area while mixing and placing EPOCHIM K 100
- EPOCHIM K 100 should not be applied onto surfaces with relative humidity more than 80%, and temperature below +5°C.

Technical Data

Properties	Results
Appearance	Liquid coating
Colors	Colmef Color Chart
Density at 25°C	1.54 kg/L
Dry residual	100%
Viscosity at 25°C	5000-7000 cps
Pot life time at 25°C	40 mins
Adhesion strength at 7 days (ASTM D4541)	> 2.0 N/mm ²
Compressive strength at 7 days (ASTM C579)	75 N/mm ²
Flexural strength at 7 days (ASTM C580)	>25N/mm ²
Tensile strength (ASTM C307)	20 N/mm ²
Abrasion resistance (ASTM D4060)	89mg
Shore D hardness (ASTM D2240)	82
Initial cure at 25°C	24 hours
Final cure at 25°C	7 days
Full chemical resistance at 25°C	7 days

All values are subject to 5-10 % tolerance

Chemical Resistance		
Aggressive chemical	Concentration	
Hydrochloric acid	50%	Resistant
Sulphuric acid	50%	Resistant
Sodium Hydroxide	50%	Resistant
Nitric acid	20%	Resistant
Acetic acid	10%	Resistant
Citric Acid	10%	Resistant
Ammonia	10%	Resistant
Petrol	-	Resistant
Hydraulic Oil	-	Resistant
Kerosene	-	Resistant
Skydrol	-	Resistant
Grease	-	Resistant
Lubricants	-	Resistant

Storage

Keep in tightly closed containers and in sheltered and dry place. Shelf life is 12 months if stored as recommended.

Health & Safety

During application, wear appropriate protective clothing, goggles, gloves and respiratory equipment. Avoid contact with skin, eyes and inhalation of vapor. Ensure proper ventilation at working place.

In case of contact with skin, rinse with water and again wash thoroughly with soap and water.

In case of contact with eyes, rinse with plenty of water and seek medical advice accordingly.

If ingested, obtain medical attention immediately. Do not induce vomiting.

Consumption

4-5 m² / liter per coat at 200 micron (wft) according to the porosity of the substrate.

Packaging

EPOCHIM K 100 is supplied in 4Liter and 15 Liter kits (Base & Hardener).

The information in this Technical Data Sheet is based on Colmef Monnelli's experience. Colmef Monnelli does not accept any liability arising from the use of its products as it has no direct or continuous control over where or how its products are applied. All Colmef Monnelli's Data Sheets are updated on regular basis. It is the user's responsibility to obtain the latest version.

DUBAI
ABU DHABI
KSA
ITALY

P.O. Box 123808 Dubai UAE
P.O. Box 127326 Abu Dhabi, UAE
P.O. Box 335896 Code: 11383 - Riyadh KSA
Z.I. Ponte d'Assi 06024 Gubbio (PG)

T. +971 4 8803488 F. +971 4 8803450
T. +971 2 5511949 F. +971 2 5511749
T. +966 1 2654277 F. +966 1 2654335
T. +39 75 9221297 F. +39 75 9221174

EPOCHIM K100
Technical Data Sheet
Edition: January 2020
Revision: 02

colmef@colmef.ae

www.colmef-me.com