

# MONNELI EPOCHIM K50

Chemical & Abrasion Resistant Anti Bacterial Wall & Floor Thin Epoxy Coating

## Description

Epochim K50 is a hygienic breathable coating based on formulated epoxy resin and curing agents specially selected for their ability to be applied and cured in a wide range of temperatures. The product is composed of 2 components; a base and a hardener, providing a lump-free smooth semi-gloss finish.

## Advantages

- Near-Zero odor and VOC.
- Self priming application.
- Does not support the growth of mould, fungi or algae.
- Ease of application.
- Excellent abrasion and chemical resistance.
- Low maintenance costs.
- Hygienic, impervious and easily cleanable.
- Used for both floors and walls.
- Available in 8 standard colors with possibility of custom RAL colors.
- High bond, stronger than concrete cohesive strength.
- Economic installation.

## Uses

- Low vehicle traffic.
- Schools and office buildings, restaurants and food factories.
- Hospital & clinic procedure rooms and pharmaceutical plants.

## Technical Data

Properties	Result
Solid Content (% Weight)	63
Recommended DFT / Coat	150-200 µm
Pot Life at 12°C / 54°F (min)	210
Pot Life at 40°C / 104°F (min)	40
Thin Film Dry Time (Hours) at 12°C at 40°C	5 2
Mixed Density at 20°C (kg/L)	1.3
Max Recoat / Topcoat Time at 12°C	None
Max Recoat / Topcoat Time at 40°C	None
Application Maximum Relative Humidity (%)	75
Bond Strength to Concrete ASTM D4541	>2 N/mm <sup>2</sup>
Taber Abrasion ASTM D4060 CS17 Wheels (mg loss/1000cycles)	< 70
Water Permeability	Nil
Porosity with no sealer NACE Sand TM-01-74	0
Pencil Hardness	6H
Application Temperature	10-45°C
Volatile Organic Content (VOC)	<5gm / Liter
Bacterial Resistance ASTM G22-76	No Growth (Pass)
Fungal Resistance STM G21-13	Rating 0 (Pass)

All values are subject to 5-10 % tolerance

The information in this Technical Data Sheet is based on Colmef Monneli's experience. Colmef Monneli 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 Monneli'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  
T. +971 2 5511949  
T. +966 1 2654277  
T. +39 75 9221297

F. +971 4 8803450  
F. +971 2 5511749  
F. +966 1 2654335  
F. +39 75 9221174

**EPOCHIM K50**  
Technical Data Sheet  
Edition : January 2019  
Revision: 02



**Disclaimer:** The TUV mark relates to certified management system and not to the product mentioned on this datasheet.

## Design Criteria

EPOCHIM K50 is designed to be a hard wearing single or dual coat application on cementitious or metal substrates. When used on metal substrates, it is recommended that the application takes place within 2 to 3 hours from substrate preparation to prevent early rust formation. The applied product will be resistant to water as well as a wide range of chemicals.

## Instructions for Use

### Surface Preparation

The surface must be sound, clean free from loose material, grease, laitance, dirt curing compound, etc.

Laitance and weak surface layer shall be removed using mechanical methods such as grinding or blasting necessary repairs should be made prior to application by using epoxy mortar from Epopinish.

New concrete floors shall be at least 28 days old with moisture content or less than 5% (shall earlier application be required testing of substrate for moisture conditions shall be made).

Steel substrates should be grit blasted to surface quality SA2<sup>1/2</sup> (BS 432: Second Quality) and application shall take place within 2 to 4 hours after blasting.

### Priming

The generally no primer is required for the use of Epochim K50, however, use Primer Poxy FF where highly absorbent cementitious surfaces.

### Mixing

The individual components of Epochim K50 should be thoroughly stirred before the three are mixed together. The entire contents of the hardener container should be poured into the base container and the materials mixed thoroughly for at least 3 minutes. The use of a heavy-duty slow speed, flame-proof or air driven drill fitted with a mixing paddle is desirable.

## Application

The mixed Epochim K50 should be applied to the prepared surface using a brush or lambs-wool roller. Ensure that the area is completely coated and that 'ponding' of the material does not occur.

## Curing

The applied coating can receive foot traffic in 24 hours, however it shall be allowed to cure for 7 days to achieve full cure to receive vehicular traffic and its chemical resistance properties.

## Cleaning

Epochim K50 should be removed from tools and equipment with water immediately after use. Hardened material can only be removed mechanically.

## Packaging & Coverage

Product	Pack Size	Yield
Epochim K50	4 Liters & 16 Liters Kit	5 m <sup>2</sup> /Liter at 200 micron wft

Stated consumptions data are for general guidance. Actual consumption depends on the nature of substrate, method of application and wastage.

## Shelf Life and Storage

Original sealed bag of Epochim K50 has a shelf life of 12 months provided it is stored clear of ground in a dry and shaded place below 35°C.

The information in this Technical Data Sheet is based on Colmef Monneli's experience. Colmef Monneli 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 Monneli'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  
T. +971 2 5511949  
T. +966 1 2654277  
T. +39 75 9221297

F. +971 4 8803450  
F. +971 2 5511749  
F. +966 1 2654335  
F. +39 75 9221174

**EPOCHIM K50**  
Technical Data Sheet  
Edition : January 2019  
Revision: 02



**Disclaimer:** The TUV mark relates to certified management system and not to the product mentioned on this datasheet.

## Health & Safety

Epochim K50 should not come into contact with skin and eyes or be swallowed. Ensure adequate ventilation and avoid inhalation of vapors. Some people are sensitive to resins, hardeners and solvents. Wear suitable protective clothing, gloves and eye protection. If working on confined areas, suitable respiratory protective equipment must be used. The use of barrier creams provide additional skin protection. In case of contact with skin, rinse with plenty of clean water, then cleanse with soap and water. Do not use solvent. In case of contact with eyes, rinse immediately - Do not induce vomiting.

Epochim K50 is non-flammable. No smoking. In the event of fire extinguish with CO<sub>2</sub>, or foam.

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 K50**  
Technical Data Sheet  
Edition : January 2019  
Revision: 02



**Disclaimer:** The TuV mark relates to certified management system and not to the product mentioned on this datasheet.