

# MAPECRETE CREME PROTECTION

Solvent-free, silane-based, thixotropic impregnating cream in water dispersion, ideal for hydrophobic treatment of concrete



## WHERE TO USE

Thanks to its high water-repellent properties, **Mapecrete Creme Protection** may be used to protect the surface of concrete floors against capillary penetration of water, the ingress of chlorides or other pollutants and continuous exposure of surfaces during freeze/thaw cycles.

The use of **Mapecrete Creme Protection** is particularly recommended for horizontal and vertical concrete surfaces exposed to atmospheric agents, on concrete structures and infrastructures such as bridges, roads, floor joists, concrete buildings in general and concrete floors.

The special formulation of **Mapecrete Creme Protection** makes it suitable for application on both porous and well-compacted concrete.

### Some application examples

- Impregnation of normal or fibre-reinforced concrete surfaces.
- Impregnation of concrete infrastructures exposed to atmospheric agents, such as bridges, floor joists, walkways and structures in marine environments.
- Impregnation of concrete structures, such as storage silos, cooling towers and buildings in general.
- Impregnation of concrete floors situated in external areas.

## TECHNICAL CHARACTERISTICS

**Mapecrete Creme Protection** is a solvent-free, silane-based, thixotropic impregnating formulate in water dispersion with a creamy consistency.

Thanks to its particular characteristic of high water repellence, **Mapecrete Creme Protection** may be used to protect surfaces against the ingress of chlorides, one of the primary causes of the deterioration of reinforcement steel in concrete, including in marine environments.

The high capillary-penetration capacity and high concentration of silane contained in the impregnator allows the product to form an excellent chemical bond with the treated concrete to guarantee a complete, long-lasting hydrophobic treatment.

The product has a creamy consistency and a low level of evaporation during handling and application, which means that the level of penetration into the substrate may be evaluated immediately after application and the level of protection required may be calibrated according to the porosity of the substrate.

Surfaces treated with **Mapecrete Creme Protection** become water-repellent while their transpiration capacity remains the same.

## ADVANTAGES

- Excellent reduction in chlorides and water absorption.
- Protection against attack by de-icing salts.
- Excellent resistance to alkalis.
- Excellent level of penetration into the concrete.
- Helps the bond of successive painting cycles.
- Solvent-free.
- Water dispersion product.
- Compatible with the environment.
- Low VOC content.
- Thixotropic.

## RECOMMENDATIONS

- Do not apply **Mapecrete Creme Protection** on dusty, crumbly or flimsy substrates.
- Do not apply **Mapecrete Creme Protection** on surfaces seeped in oil, form release agent or grease.
- Do not apply **Mapecrete Creme Protection** on concrete substrates which have not been sufficiently cured.
- Before applying **Mapecrete Creme Protection**, make sure the surface is evenly dry and that there is no stagnant water or puddles.
- If it is about to rain, stop application of the **Mapecrete Creme Protection** and cover any surfaces already treated.

## APPLICATION PROCEDURE

### Preparation of the substrate

The surface of the concrete must be sound, perfectly clean, dry and free of all traces of dust, grease and form release agent.

Make sure that new concrete surfaces are well cured. Sand the surface, remove all dust and wash the surface before starting application of the product.

Any cement laitance present on the surface to be treated must be removed mechanically.

### Application of the product

Spread **Mapecrete Creme Protection** directly on the surface with a squeegee, an airless spray gun, by brush or with a roller.

**Mapecrete Creme Protection** may be applied in one or two coats, according to the absorption and condition of the concrete substrate.

Immediately after applying the product, the surface turns a whitish colour with a creamy consistency which then becomes transparent when dry (from 30 minutes to several hours, depending on the absorption of the concrete).

Thanks to the thixotropic consistency of the product it may also be applied on vertical surfaces.

## CLEANING

Tools used to prepare and apply **Mapecrete Creme Protection** must be cleaned immediately after use with water. Once hardened, the product may only be removed using mechanical means.

## CONSUMPTION

0.1-0.4 kg/m<sup>2</sup> according to the absorption of the concrete.

## PACKAGING

25 kg drums.

## STORAGE

**Mapecrete Creme Protection** may be stored for up to 12 months in its original packaging in a dry area at a temperature between +12°C and +30°C.

## SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

**Mapecrete Creme Protection** is not considered hazardous according to current norms and guidelines regarding the classification of mixtures.

However, we recommend the use of protective gloves and goggles, and to take the usual precautions for handling chemical products.

For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet.



TECHNICAL DATA (typical values)			
PRODUCT IDENTITY			
Colour:		yellowish white	
Appearance:		creamy	
Density (g/cm³):		0.9	
Dry substances content (%):		80	
APPLICATION DATA			
Flash point (ISO 3679):		+64°C	
PERFORMANCE CHARACTERISTICS FOR CE CERTIFICATION ACCORDING TO EN 1504-2, COMPLIANCE CERTIFICATION SYSTEM 2+, CLASS ZA.1a (H, PI-MC-IR Principles)			
Performance characteristic	Test method according to EN 1504	Requirements	Product performance
Penetration depth:	EN 1504-2 (prospect 3, n.19)	Class I: < 10 mm Class II: ≥ 10 mm	11 mm (Class II)
Water absorption and resistance to alkalis:	EN 13580	Absorption ratio < 7.5 compared with untreated test sample	5.1%
		Absorption ratio after immersion in alkali solution < 10%	5.3%
Drying speed coefficient:	EN 13579	Class I: > 30% Class II: > 10%	38.6% (Class I)
Loss in mass after freeze-thaw cycles with de-icing salts:	EN 13581	The loss in mass at the surface of the impregnated test sample must occur at least 20 cycles after the non-impregnated test sample	Δ cycles > 20
Hazardous substances	/	In compliance with EN 1504-2 , 5.3	Complies

## WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application: for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website [www.mapei.com](http://www.mapei.com)

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