

Solvent free two component epoxy primer to be used as an adhesion promoter for products of the Mapefloor line and to consolidate and waterproof cementitious substrates



### WHERE TO USE

Waterproofing cementitious screeds which have a residual humidity content higher than the maximum level recommended for laying wooden and resilient floors.

Consolidating unstable and/or mechanically weak substrates.

Priming absorbent concrete surfaces before applying epoxy resin-based products from the **Mapefloor** range.

Some application examples

- Consolidating the surface of cementitious screeds which are mechanically weak due to a lack of binders or insufficient curing.
- Waterproofing treatment before laying parquet, to prevent rising damp due to excessive residual humidity in the screed.
- Anti-dust treatment for cementitious and anhydrite screeds with an unstable surface.
- Binder for mixing with quartz for preparing synthetic mortar for small smoothing and repair operations.
- Priming absorbent concrete surfaces before applying epoxy resin-based products from the Mapefloor range to improve their bonding.

 Impregnator with a dust-repellent finish, for concrete industrial floors and surfaces for laying raised floors.

## TECHNICAL CHARACTERISTICS

**Primer MF** is a two-component resin epoxy primer with low viscosity and at the same time having a high penetration capacity in the pores of the substrates.

**Primer MF** does not contain solvents, therefore is not flammable, only having the typical odour of resin based products.

Because of the total absence of solvents **Primer MF** can also be used in building sites situated near inhabited environments (e.g. apartments, schools, offices, etc.).

After the application of **Primer MF** and the polymerisation of the resins, the substrate is sound, stronger and more resistant to abrasion.

# RECOMMENDATIONS

- Do not dilute Primer MF with water or solvents. If the product needs to be diluted, only use Primer KL.
- Do not use on wet surfaces and when there is continuous rising water.
- If levelling compounds or flooring adhesives need to be applied over Primer MF treated substrates,

Primer MF

scatter evenly the surface with **Quartz 1.2** or clean dry sand while the primer is still fresh.

- Do not apply any product (smoothing and levelling layer or adhesive) on surfaces treated with **Primer MF** which have a shiny finish. If the excess product doesn't penetrate into the pores of the screed, or if sand has not been sprinkled on the surface and it has already set, the surface must be well sanded.
- The product is suitable for consolidating heated screeds and anhydrite substrates, but they must not be treated with a waterproofing product. Therefore, make sure that these kinds of substrate are dry before applying the primer.
- When laying parquet on substrates treated with Primer MF, use a reactive polyurethane adhesive (such as Ultrabond P990 1K) or an epoxypolyurethane adhesive (such as Lignobond or Ultrabond P902 2K).
- Successive applications of products from the Mapefloor range (e.g. Mapefloor EP19, Mapefloor I 30 SL, etc.) must be carried out before the Primer MF has hardened.

APPLICATION PROCEDURE
Preparing the substrate
The screed must be clean and free of oil,
wax and dirt. Traditional screeds must be
cured for at least 7-10 days per centimetre
of thickness, while quick-drying or rapiddrying screeds must be cured accorded
to the manufacturer's instructions for each
particular product. Remove cement
laitance on concrete surfaces by
mechanical abrasion so that **Primer MF**can penetrate into the substrate well.

In order to ensure good penetration of **Primer MF**, the surfaces of cementitious and concrete substrates which are very sound, must be abraded before it is applied.

Cracks and surface crazing must be opened and then sealed with **Eporip** or **Eporip Turbo** to eliminate unevenness.

Preparing the product The two components of **Primer MF** are supplied pre-measured:

component A: 3 parts by weight; component B: 1 part by weight.

The parts must be mixed together with a low speed mixer until a uniform mix is obtained.

Application of the product

 For consolidating and waterproofing treatments
 Apply Eco Primer MF with a roller, a brush or flat trowel in one or more coats, according to the quantity required. For waterproofing treatments, apply at least 2 coats of the product, and wait at least 3 hours between each coat. Do not wait more than 12-24 hours between each application in order to guarantee that there is a perfect bond between each coat. The first coat may be diluted with Primer KL (maximum one 1 litre bottle (0.8 kg) for each 6 kg kit of **Primer MF**). If **Eco Primer MF** is not completely absorbed, sprinkle a layer of Quartz 1.2 or clean, dry sand on the product while it is still fresh. The remains of sand which are not well bonded must be removed before carrying out any further applications. With surfaces treated as described

With surfaces treated as described above, wait at least 24-36 hours, according to the temperature, before smoothing and levelling the surface, or before applying wooden floors with a reactive polyurethane adhesive (such as Ultrabond P990 1K) or an epoxypolyurethane adhesive (such as Ultrabond P902 2K or Lignobond). If sand or quartz is not sprinkled on the surface of the primer, wooden floors must be laid before it has completely set (within 24-36 hours) using only a two-component epoxy-polyurethane adhesive (such as Lignobond or Ultrabond P902 2K).

# For repair operations

If only small areas of the screed need to be smoothed over or repaired, Primer MF diluted with Primer KL mixed with Quartz 1.2 may be used. The mixing ratio in this case is 7 kg of Quartz 1.2 per 6 kg of Primer MF diluted with 1 litre (0.8 kg) of Primer KL. The mortar prepared using this blend is easy to apply and, once set, forms a very solid repaired area on which any kind of parquet may be applied. The mortar must be applied on substrates which have been treated with Primer MF (diluted with Primer KL if required) applied within the previous 24 hours. Parquet floor covering must be bonded using a reactive polyurethane adhesive (such as Ultrabond P990 1K) or an epoxy-polyurethane adhesive (such as Lignobond or Ultrabond P902 2K).

 As a primer for products from the Mapefloor range

Impregnate the surface of the substrate with a roller or brush, applying several successive coats if required. Epoxy products from the **Mapefloor** range must be applied before the **Primer MF** has hardened.

## Cleaning

**Primer MF** can be cleaned from tools and clothing with ethyl alcohol while the product is still fresh.

TECHNICAL DATA (typical values)		
PRODUCT IDENTITY		
	component A	component B
Colour:	transparent yellow	transparent yellow
Density (g/cm³):	1.12	1.00
Maximum permissible residual humidity for waterproofing:	5%, measured using a carbide hygrometer (for screed thicknesses of approximately 6 cm)	
Hazard classification according to EC 1999/45:	irritant, dangerous corrosive for the environment Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet	
Brookfield Viscosity (mPa·s):	350 (# 2 - rpm 50)	150 (# 2 - rpm 50)
Dry solids content (%):	100	100
Storage:	24 months	24 months
Customs class:	3208 90 91	
APPLICATION DATA		
Mix ratio:	component A : component B = 3 : 1	
Consistency of mix:	liquid	
Colour:	transparent	
Density (g/cm³):	1.1	
Brookfield Viscosity (mPa·s):	300 (# 2 - rpm 50)	
Application temperature range:	from +10°C to +30°C	
Workability - at +10°C: - at +23°C: - at +30°C:	120 minutes 90 minutes 60 minutes	
Setting time - at +10°C: - at +23°C: - at +30°C:	5-6 hours 3-4 hours 2-3 hours	
Final curing at +23°C:	7 days	
FINAL PERFORMANCES		
Resistance to moisture:	excellent	
Adhesion to concrete (N/mm²):	> 3 (failure in the substrate)	
Temperature when in use:	from -5°C to +80°C	





COVERAGE 0.200-0.300 kg/m<sup>2</sup> each coat.

#### **PACKAGING**

The product is available in 1 kg (component A 0.750 kg + component B 0.250 kg) and 6 kg (component A 4.5 kg + component B 1.5 kg) boxes.

# **STORAGE**

The product is stable for 24 months when stored in a cool, dry sheltered place. Protect from frost.

# SAFETY INSTRUCTIONS FOR PREPARATION AND INSTALLATION

**Primer MF** component A is irritant in direct contact with eyes and skin.

**Primer MF** component B contains highly caustic and harmful substances when inhaled.

If in direct contact with the skin, can produce sentitivity of the skin. Always wear protective gloves and goggles and provide good ventilation when using the product. During application, make sure the working areas are well ventilated.

In case of contact with skin or eyes, wash thoroughly with running water and seek

medical advice (consult the safety data sheet).

**Primer MF** component A is dangerous for aquatic organisms - do not dispose of the product to the environment.

## PRODUCT FOR PROFESSIONAL USE.

# WARNING

Although the technical details and recommendations contained in this 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 applications: 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.

All relevant references for the product are available upon request and from www.mapei.com

