



Mapecfloor EP19

Three-component epoxy mortar for acid-resistant and wear-resistant flooring

WHERE TO USE

For repairs, including thick applications to concrete surfaces subject to heavy abrasion; acid-resistant toppings that are highly resistant to wear for concrete floors subject to heavy traffic.

Some application examples

- Repair and levelling of reinforced concrete bearings for crane and bridge crane runways.
- Wear-resistant beds for machinery, beams, etc.
- Rebuilding the corners of expansion joints in industrial flooring damaged by impact from trucks and forklifts, etc.
- Acid-resistant floors subject to heavy abrasion in industrial installations.
- Acid-resistant, wear-resistant protection of beds for sewage treatment machinery and concrete sewage pipes.
- Wear-resistant protection of reinforced concrete elements such as ramps, silo beds, and concrete floors subject to heavy traffic.

TECHNICAL CHARACTERISTICS

Mapecfloor EP19 is a three-component mortar manufactured from a formula developed in the Mapei research laboratories. **Mapecfloor EP19** is composed of a fluid epoxy resin, a special hardener, and graded silica sand mineral filler that is ideal for preparing highly compact mortar.

Mapecfloor EP19 hardens without significant shrinkage

and develops high mechanical strength. It is extremely resistant to abrasion and also has good resistance to aggressive chemical agents.

At +23°C **Mapecfloor EP19** is set for light foot traffic 6 hours after application and ready for vehicle traffic after 12 hours. Final curing occurs after 7 days.

RECOMMENDATIONS

- Do not apply **Mapecfloor EP19** without first applying **Primer MF**.
- Apply **Mapecfloor EP19** on the still fresh **Primer MF**.
- Do not apply **Mapecfloor EP19** on substrates subject to strong capillary action.
- Do not mix partial quantities of the components in order to prevent mistakes in the mix ratio that could interfere with the hardening of the product.
- Do not expose the product to heat sources after mixing.

APPLICATION PROCEDURE

Preparing the substrate

- Before applying, make sure the substrate is properly cured, without cracks and with a solid surface.
- Remove cement laitance from the surface, along with any loose particles, oils or other materials that may interfere with bonding.
- Metal surfaces should be sanded down to white metal before applying the product.

TECHNICAL DATA (typical values)			
PRODUCT IDENTITY:			
	Part “A”	Part “B”	Part “C”
Consistency:	viscose liquid	liquid	powder
Colour:	straw yellow	straw yellow	sand- coloured
Density:	1.17 g/cm³	1.07 g/cm³	
Dry solid content:	100%	100%	100%
Viscosity (mPa·s):	3500	40	
Storage:	24 months in a dry place in original packaging. Store part B at least at +10°C to avoid crystallisation of the product, which is anyway reversible.		
Hazard classification according to EEC 88/379:	irritant corrosive Before use consult the “Safety instructions” paragraph and the information on the packaging and safety data sheet.		
Customs class:	3824 50 90		
APPLICATION DATA at +23°C and 50% R.H.:			
Mix ratio by weight A : B : C:	Part A : Part B : Part C = 7.5 : 2.5 : 90		
Consistency of mix:	damp earth		
Density of mix:	1.9 g/cm³		
Application temperature range:	from +5°C to +30°C		
Workability at +23°C:	30-40'		
Set to light foot traffic:	6 hours		
Ready for use:	12 hours		
FINAL PERFORMANCES AT +23°C - 50% R.H.:			
Resistance to moisture:	excellent		
Resistance to temperature:	from -20°C to + 120°C		
Resistance to ageing:	excellent		
Resistances to oils:	excellent		
Resistance to acids and alkalis:	excellent		
Compressive strength (EN 196/1): – after 1 day: – after 7 days:	40 N/mm² 50 N/mm²		
Flexural strength (EN 196/1): – after 1 day: – after 7 days:	17 N/mm² 20 N/mm²		
Adhesion to concrete:	> 2 N/mm² (rupture of the substrate)		
Abrasion resistance - Taber abrasion test (H22 disk - 1,000 g - 1,000 rev) expressed in weight loss: – after 1 day: – after 7 days:	2.2 g 1.1 g		
Modulus of elasticity under compression (UNI 6556): – after 7 days:	19,500 N/mm²		

Applying Primer MF

Immediately before applying

Mapefloor EP19, surfaces must first be treated with **Primer MF**, a two-component epoxy primer in pre-measured packaging.

Mix thoroughly **Primer MF** Part A with Part B, then brush on until the substrate is completely saturated.

Preparing Mapefloor EP 19

Pour **Mapefloor EP19** Part A and B into a bucket and mix for several minutes. Then add Part C (the powdered component) while mixing on low speed until the mix is even and of a "damp earth" consistency.

Applying the product

Trowel the **Mapefloor EP19** on the primer while the latter is still fresh, then tamp it and float finish with a metal trowel.

Finishing

To reduce the porosity and the setting of dirt on the **Mapefloor EP19** surface, one of the two procedures may be followed:

- cover the surface by applying several coats of **Primer MF** or **Mapecoat I24**;
- protective surface levelling with **Mapefloor I30 SL**.

Cleaning

Tools and clothing must be cleaned with ethyl alcohol while the product is still fresh.

SAFETY INSTRUCTIONS FOR THE PREPARATION AND INSTALLATION

Mapefloor EP19 part A is irritating in direct contact with eyes and skin.

Mapefloor EP19 part B contains strongly caustic and harmful substances when inhaled. If in direct contact with the skin, sensitisation phenomena could be caused.

Avoid any type of contact with the skin by always wearing protective gloves and goggles and create good ventilation when using the product. In case of contact with the skin and eyes, immediately wash with plenty of running water and if necessary consult a doctor (consult the safety data sheet).

CONSUMPTION

Mapefloor EP19:

20 kg/m² per cm of thickness.

Primer MF:

0.200÷0.300 kg/m² depending on the absorbency of the substrate.

PACKAGING

Mapefloor EP19 is available in buckets containing 10 kg of the product in accurately pre-measured components (0.750 kg Part A + 0.250 kg Part B + 9 kg Part C).

Primer MF is available in 1 kg boxes (0.750 kg Part A + 0.250 kg Part B) and 6 kg boxes (4.5 kg Part A + 1.5 kg Part A).

STORAGE

The product is stable for 2 years when stored in a cool, dry sheltered place at a temperature not less than +5°C.

FOR PROFESSIONALS.

WARNING

N.B. - Although the technical details and recommendations contained in this product report 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
of the product are available
upon request**

