



# Mapecfloor I 300 SL



**Two-component,  
multi-purpose,  
neutral-coloured  
epoxy formulated for  
industrial floorings  
up to 4 mm thick**

## WHERE TO USE

**Mapecfloor I 300 SL** is a two-component epoxy formulation suitable for self-levelling and/or multi-layered resin floorings and/or as a paint with an attractive smooth or non-slip finish.

### Some application examples

- Floor coating in the chemicals and pharmaceuticals industries.
- Floor coating in the foodstuffs industry.
- Floor coating in laboratories, sterile rooms and hospitals.
- Floor coating in aseptic rooms.
- Floor coating in mechanized warehouses.
- Floor coating in shopping centres.

## TECHNICAL CHARACTERISTICS

**Mapecfloor I 300 SL** is a nonylphenol-free, two-component epoxy resin formulate with fillers according to a formula developed in MAPEI's research laboratories.

**Mapecfloor I 300 SL** is highly versatile and may be applied in layers up to 4 mm thick.

**Mapecfloor I 300 SL** is safe for the environment and contains no nonylphenol, which makes it particularly suitable for the foodstuffs industry. After application, surfaces are continuous and flat with a highly attractive finish.

**Mapecfloor I 300 SL** is strong, has excellent resistance to chemicals and wear and may be used in both self-levelling and multi-layered systems.

**Mapecfloor I 300 SL** complies with the principles defined in UNI EN 13813 "Screeds and materials for screeds – Materials for screeds – Properties and requirements", which specifies the requirements for materials for screeds used in the construction of internal floors. Screeds and structural coating materials, such as those which help increase the load-bearing capacity of floors, are not included in this Standard.

Resin floor coating materials and cementitious screeds are included in this specification. They must bear the CE symbol, as illustrated in attachment ZA.3 Tables ZA.1.5 and 3.3.

## RECOMMENDATIONS

- Do not apply **Mapecfloor I 300 SL** on damp substrates or on substrates with capillary rising damp (contact Mapei Technical Assistance Department).
- Do not dilute **Mapecfloor I 300 SL** with solvent or water.
- Do not use **Mapecfloor I 300 SL** for external applications.
- Do not apply **Mapecfloor I 300 SL** on dusty or crumbly substrates.
- Do not apply **Mapecfloor I 300 SL** on substrates polluted with oil, grease or dirt in general.
- Do not apply **Mapecfloor I 300 SL** on substrates which have not been treated with **Primer SN** or which have not been prepared sufficiently.
- Do not mix partial quantities of the components to avoid mixing errors, otherwise the product may not harden correctly.
- Do not expose the mixed product to sources of heat.

## APPLICATION PROCEDURE

### Preparation of the substrate

Surfaces to be treated with this product must be flat, clean, dry and not subject to capillary rising damp. The substrate screed must also be strong enough for the loads to which it will be subjected when in service.

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

Any cracks must be repaired by filling them with **Eporip**, while any deteriorated areas of the concrete must be repaired with **Mapecfloor EP19** or a cementitious mortar from the **Mapecgrout** range.

Before applying **Mapecfloor I 300 SL**, remove all traces of dust from the surface with a vacuum cleaner.

## Application of Primer SN

Apply an even coat of neat **Primer SN**, or mixed with **Quartz 0.5**, on the substrate after it has been prepared sufficiently with a flat spatula or smooth rake. Immediately after applying **Primer SN**, sprinkle **Quartz 0.5** on the surface while it is still fresh to ensure that the successive resin coating layer forms a perfect bond.

## Preparation of the product

The two components which make up **Mapefloor I 300 SL** must be blended together. Pour component B (hardener) into component A (resin), add **Mapecolor Paste** (0.7 kg for each 8 kg kit of **Mapefloor I 300 SL**) and mix with a low-speed drill to avoid air being dragged into the mix. Mix again for a few minutes until a smooth, lump-free mix is obtained.

## Application of the product

**Mapefloor I 300 SL** may be used to create non-slip floorings (from 0.8 to 3.5 mm thick) or self-levelling floorings (from 2 to 4 mm thick). The application procedures are the followings:

### 1. Multi-layer non-slip coating layer - from 0.8 to 1.2 mm thick (Mapefloor System 31)

- Prepare the substrate by shot-blasting and remove all traces of dust with a vacuum cleaner.
- Apply a complete kit of **Primer SN** (A+B) mixed together with 4 kg of **Quartz 0.5** using a smooth spatula and, while still fresh, sprinkle the same sand on the surface until the primer is completely saturated.
- When the primer has hardened, remove any excess sand with an industrial vacuum cleaner, sand the surface and to apply **Mapefloor I 300 SL** mixed beforehand by mixing together components A and B with the recommended quantity of **Mapecolor Paste** using a medium-haired roller in criss-cross strokes.

### 2. Smooth self-levelling coating layer - from 2 to 4 mm thick (Mapefloor System 33)

- Prepare the substrate by shot-blasting and remove all traces of dust with a vacuum cleaner.
- Apply a complete kit of **Primer SN** (A+B) mixed together with 4 kg of **Quartz 0.5** using a smooth trowel and, while still fresh, sprinkle the same sand on the surface at a rate of approximately 0.5 kg/m<sup>2</sup>.
- Once hardened, remove any sand which has not bonded, mix the **Mapefloor I 300 SL**, preliminary prepared, with a further addition of **Quartz 0.25** at a rate of up to 1:1 according to the surrounding temperature, and mix again until a smooth, well-blended mix is obtained. Pour the mix onto the floor and spread out evenly using a notched trowel (with "V" shaped teeth).
- Pass over the surface with a spike-roller while the product is still fresh to even out the thickness and remove air entrapped in the product.

### 3. Multi-layer non-slip coating layer - from 3.0 to 3.5 mm thick (Mapefloor System 32)

- Prepare the substrate by shot-blasting and remove all traces of dust with a vacuum cleaner.
- Apply a complete kit of **Primer SN** (A+B) mixed together with 4 kg of **Quartz 0.5** using a smooth trowel and, while still fresh, sprinkle the same sand on the surface until the primer is completely saturated.
- Once hardened, remove any excess sand with an industrial vacuum cleaner and carefully mix the **Mapefloor I 300 SL**, preliminary prepared with a further addition of **Quartz 0.5**

at a rate of up to 1:0.5 until a smooth, well-blended mix is obtained. Pour the product onto the floor and spread it out evenly with a smooth, flat trowel.

- Sprinkle **Quartz 0.5** sand on the surface of the **Mapefloor I 300 SL** until it is saturated.
- When it has hardened remove the excess sand, sand the surface and remove the dust with an industrial vacuum cleaner.
- Apply a finishing layer of neat **Mapefloor I 300 SL** with a smooth, flat trowel or rake to a feather edge and pass over the surface with a short-haired roller in criss-cross strokes.

**N.B.:** the examples above are for indication purposes only. *The amount of **Primer SN** required may vary according to the surrounding temperature. The amount required may be less at low temperatures and more at high temperatures.*

## CONSUMPTION

### 1. Multi-layer non-slip coating 1 mm thick (Mapefloor System 31)

• FIRST LAYER	
<b>Primer SN</b>	0.7 kg/m <sup>2</sup>
Sprinkling of <b>Quartz 0.5</b> on fresh product	3.0 kg/m <sup>2</sup>

• FINISHING COAT	
<b>Mapefloor I 300 SL</b>	0.6 kg/m <sup>2</sup>

### 2. Smooth self-levelling coating 2 mm thick (Mapefloor System 33)

• FIRST LAYER	
<b>Primer SN</b>	0.7 kg/m <sup>2</sup>
Sprinkling of <b>Quartz 0.5</b> on fresh product	0.5 kg/m <sup>2</sup>

• FINISHING COAT	
<b>Mapefloor I 300 SL</b> (includes the <b>Quartz 0.25</b> )	4.0 kg/m <sup>2</sup>

### 3. Multi-layer non-slip coating 3 mm thick (Mapefloor System 32)

• FIRST LAYER	
<b>Primer SN</b>	0.7 kg/m <sup>2</sup>
Sprinkling of <b>Quartz 0.5</b> on fresh product	3.0 kg/m <sup>2</sup>

• INTERMEDIATE LAYER	
<b>Mapefloor I 300 SL</b>	0.9 kg/m <sup>2</sup>
Sprinkling of <b>Quartz 0.5</b> on fresh product	3.0 kg/m <sup>2</sup>

• FINISHING COAT	
<b>Mapefloor I 300 SL</b>	0.6 kg/m <sup>2</sup>

## Cleaning

Tools used to prepare and apply **Mapefloor I 300 SL** must be cleaned immediately after use with ethanol. Once hardened, the product may only be removed mechanically.

## PACKAGING

8 kg kits:  
component A = 6 kg; component B = 2 kg.

## STORAGE

The product must be stored in its original packaging in a dry place at a temperature of at least +5°C.

## SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

**Mapefloor I 300 SL** component A may irritate the eyes and skin. Component B is corrosive and may cause burns, serious eye damage or allergic rashes in those subjects sensitive to such products. Always wear protective goggles, gloves and clothing. If it comes into contact with the skin or eyes, wash with clean water and seek urgent medical attention. Component A and Component B are harmful for aquatic life. Do not dispose of the product in the environment.

## TECHNICAL DATA (typical values)

### PRODUCT IDENTITY

	component A	component B
Colour:	neutral	straw
Appearance:	liquid	liquid
Density (g/cm <sup>3</sup> ):	1.5	1.0
Viscosity at +23°C (mPa·s):	2,150	300
Hazard classification according to EC 1999/45:	irritant, harmful for the environment	corrosive
	Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet	

### APPLICATION DATA (at +23°C and 50% R.H.)

Mixing ratio:	component A : component B = 3 : 1
Colour of mix:	neutral
Consistency of mix:	thick fluid
Density of mix (kg/m <sup>3</sup> ):	1,340
Viscosity of mix (mPa·s):	832
Workability time at +20°C:	35 minutes
Application temperature range:	from +8°C to +35°C

### FINAL PERFORMANCE

Dust dry at +23°C and 50% R.H.:	2-4 hours
Set to light foot traffic at +23°C and 50% R.H.:	24 hours
Final hardening time:	7 days
Taber Test after 7 days (EN ISO 5470-1) (at +23°C, 50% R.H, 1,000 cycles/1,000 g, CS17 disk) (mg):	70

Performance characteristic	Test method	Requirements according to UNI EN 13813 for synthetic resin screeds	Performance of product
BCA wear-resistance	UNI EN 13892-4	≤ 100 µm	10 µm
Bond strength	UNI EN 13892-8; 2004	≥ 1.5 N/mm <sup>2</sup>	3.10 N/mm <sup>2</sup>
Impact strength	UNI EN ISO 6272	≥ 4 Nm	20 Nm

# Mapefloor I 300 SL

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

PRODUCT FOR PROFESSIONAL USE.

## 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)**

**All relevant references for the product are available upon request and from [www.mapei.com](http://www.mapei.com)**



Via Cafiero, 22 – 20158 Milan (Italy)

### UNI EN 13813 SR-B2,0-AR0,5-IR20

Synthetic resin flooring for use inside buildings

Reaction to fire:	B <sub>f1</sub> s1	Impact strength:	IR20
Emission of corrosive substances:	SR	Soundproofing capacity:	NPD
Permeability to water:	NPD	Acoustic absorption:	NPD
Wear resistance:	AR 0.5	Thermal resistance:	NPD
Bond strength:	B2.0	Chemical resistance:	NPD



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