



Mapefloor I 320 SL CONCEPT



Self-levelling, solvent-free epoxy floor coating with a coloured granular effect, to create floors which are resistant to abrasion

WHERE TO USE

Mapefloor I 320 SL CONCEPT is used as a floor coating in both industrial and civil environments subject to medium-heavy loads, such as laboratories and distribution warehouses.

Mapefloor I 320 SL CONCEPT may also be used on floors in sterile environments, such as operating theatres in clinics and hospitals, or in production areas in the pharmaceutical industry.

Its attractive appearance and excellent resistance to abrasion, which is greater than that of conventional self-levelling systems, also makes it suitable in environments with heavy pedestrian traffic, such as bars, hotel receptions, canteens, classrooms, showrooms, etc.

Some application examples

- Floors in sterile areas, such as production areas in the pharmaceuticals industry, and in isolation wards.
- Floors in clinics, canteens and laboratories.
- Decorative floors in showrooms and distribution warehouses.

TECHNICAL CHARACTERISTICS

Mapefloor I 320 SL CONCEPT is a two-component, epoxy resin-based treatment, made according to a special formula developed in MAPEI's own R&D laboratories.

Its hardened surface is very smooth and forms a continuous, flat floor which is easy to clean and sterilise.

Mapefloor I 320 SL CONCEPT is available in special coloured blends, which give the floor a particularly attractive appearance.

Mapefloor I 320 SL CONCEPT complies with the principles defined in EN 13813 "Screed material and floor screeds - Screed material - Properties and requirements", which defines the requirements applied to materials for screeds used in the construction of internal floors.

Structural screeds, such as, screeds which contribute to the load-bearing of a structure, are not included in this standard.

The resin-based floor coatings and the cementitious screeds are included in this specification, according to annex ZA.3, tables ZA.1.5 and 3.3.

ATTENTION

- Do not apply **Mapefloor I 320 SL CONCEPT** if the temperature is lower than +8°C or higher than +35°C.

APPLICATION PROCEDURE

Preparation of the substrate

The surface to be treated must be solid and free of dust, dirt, paint, wax, oil and any other material which could effect the finish of the product.

Any deteriorated areas must be repaired before application.

Gravel clusters or minor imperfections on the substrate must be repaired using a cementitious mortar from the **MapegROUT** range, or with epoxy mortar such as **Mapefloor EP19**.

Before applying the product, remove all dust from the surface using an industrial vacuum cleaner.

TECHNICAL DATA (typical values)			
PRODUCT IDENTITY			
	component A	component B	
Colour:	light grey, dark grey, light blue, dark blue, red	straw-yellow	
Appearance:	thick liquid	liquid	
Dry substances content (%):	100	100	
Density (g/cm³):	1.37	1.0	
Viscosity at +23°C (mPa·s):	80,000	300	
APPLICATION DATA (at +23°C - 50% R.H.)			
Mixing ratio:	component A : component B = 100 : 22		
Colour of mix:	light grey, dark grey, light blue, dark blue or red		
Consistency of the mix:	fluid		
Density of the mix (kg/m³):	1,320		
Viscosity of the mix (mPa·s):	9,300		
Pot life:	20 minutes		
Application temperature range:	from +8°C to +35°C		
Final hardening time (days):	7		
FINAL PERFORMANCE			
Compressive strength DIN EN 196-1: – after 7 days at +23°C (N/mm²):	52		
Flexural strength DIN EN 196-1: – after 7 days at +23°C (N/mm²):	31		
Shore D surface hardness:	75		
Abrasion resistance (Taber abrasion-test) (EN ISO 5470-1) (CS17 disk - 1000 g - 1000 rpm) expressed as loss in weight: – after 7 days (mg):	80		
Performance characteristic	Test method	Requirements according to UNI EN 13813 for synthetic resin screeds	Product performance
Wear resistance (BCA) (µm):	UNI EN 13892-4	≤ 100	0
Bond strength (N/mm²):	UNI EN 13892-8; 2004	≥ 1.5	3.20
Impact resistance (Nm):	UNI EN ISO 6272	≥ 4	20
Reaction to fire	EN 13501-1	from A _{1fl} to F _{fl}	C _{fl} -S1

Check the moisture content of the substrate before applying the primer. The moisture content of the substrate must be no greater than 4%.

Preparation and application of Primer SN

Pour component B (4 kg) into component A (16 kg) and mix with a low-speed drill fitted with a spiral mixing attachment until a homogenous mix is obtained.

While still mixing, add 4 kg of **Quartz 0.5** to the blend, and continue mixing for a few minutes until a homogenous blend is obtained.

Pour the **Primer SN** mix onto the floor to be treated, and spread it out evenly and uniformly using a smooth spreader or a smooth rake.

Immediately after application, the “fresh” surface obtained with **Primer SN** must be fully sprinkled with **Quartz 0.5**.

When the **Primer SN** has hardened, remove the excess sand with a heavy-duty vacuum cleaner.

Prepare a further mix of **Primer SN** and add **Mapecolor Paste** (0.7 kg for each 20 kg bag of **Primer SN**), using a colour which is similar to the final one required, and apply this mix on the previously primed surface.

Sprinkle the surface again with **Quartz 0.5**. Once the **Primer SN** has hardened, remove any excess sand using a heavy-duty vacuum cleaner.

Preparation and application of Mapefloor I 320 SL CONCEPT

The two components which make up **Mapefloor I 320 SL CONCEPT** must be mixed together. Pour component B (catalyst) into component A (resin), and mix for approximately 3 minutes with a low-speed drill with a mixing attachment until a homogenous mix is obtained.

Apply the product using a smooth or notched trowel at a thickness of at least 2 mm on the primed floor surface.

CONSUMPTION

Primer SN:

According to the absorption and roughness of the substrate. If **Primer SN** is applied on surfaces with low absorption and a medium rough surface, the consumption rate is approximately 0.7 kg/m².

Mapefloor I 320 SL CONCEPT:
3 kg/m².

Cleaning

Tools used to prepare and apply **Mapefloor I 320 SL CONCEPT** must be cleaned with alcohol immediately after use. Once hardened, the product may only be removed using mechanical means.

PACKAGING

16.8 kg kits:
component A = 13.8 kg;
component B = 3 kg.

STORAGE

Mapefloor I 320 SL CONCEPT may be stored for 12 months in its original packaging in a dry place at a temperature of between +8°C and +35°C.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Mapefloor I 320 SL CONCEPT component A is irritant for the eyes and skin. Component B is corrosive and may cause severe burns. It is also harmful if it comes into contact with the skin or if swallowed. Both component A and component B may provoke rashes in those subjects who are allergic to such substances. Always use protective gloves and goggles when handling and using the products. If they come into contact with the eyes, wash well with plenty of clean water and seek medical attention.

Mapefloor I 320 SL CONCEPT (components A and B) is hazardous for aquatic life. Do not dispose of the product in the environment. 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

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

**Mapefloor
I-320 SL CONCEPT**



Via Cafiero, 22 - 20158 Milan (Italy)

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

Synthetic resin floor coating for internal use

Reaction to fire:	C _{fl} -s1
Release of corrosive substances:	SR
Water permeability:	NPD
Wear resistance:	AR 0.5
Bond strength:	B2.0
Impact resistance:	IR20
Soundproofing:	NPD
Sound absorption:	NPD
Thermal resistance:	NPD
Chemical resistance:	NPD

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