



# Mapecfloor I 320 SL CONCEPT



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



## **CLASSIFICATION IN COMPLIANCE WITH EN 13813**

**Mapecfloor 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.

## **WHERE TO USE**

**Mapecfloor 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.

Because of its property of neutralising electrostatic charges, **Mapecfloor 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**

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

**Mapecfloor I 320 SL CONCEPT** has excellent strength and resistance to abrasion. It also neutralises electrostatic charges, which makes it suitable for use in sterile environments.

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

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

## **ATTENTION**

Do not apply **Mapecfloor 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

TECHNICAL DATA (typical values)			
PRODUCT IDENTITY			
	component A		component B
Colour:	light grey, dark grey, light blu, dark blue, red		straw-yellow
Appearance:	thick liquid		liquid
Dry substances content (%):	100		–
Density (g/cm³):	1.37		1.0
Viscosity at +23°C (mPa·s):	80,000		300
Hazard classification according to EC 1999/45:	irritant, dangerous 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		corrosive, dangerous for the environment
Storage:	12 months in its original, unopened packaging		
Customs class:	3208 90 91		
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 A1fl to Ffl	C(fl)-S1

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 **Mapecgrout** range, or with epoxy mortar such as **Mapecfloor EP19**.

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

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 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 Mapecfloor I 320 SL CONCEPT**

The two components which make up **Mapecfloor 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 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/m<sup>2</sup>.

#### **Mapecfloor I 320 SL CONCEPT:**

3 kg/m<sup>2</sup>.

### **Cleaning**

Tools used to prepare and apply **Mapecfloor 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**

**Mapecfloor 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**

**Mapecfloor I 320 SL CONCEPT** component A is an 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.

**Mapecfloor I 320 SL CONCEPT** (components A and B) is hazardous for aquatic life. Do not dispose of the product in the environment. Further information is available on the product Safety Data Sheets.

FOR PROFESSIONAL USERS.

### **WARNING**

*While the indications and guidelines contained in this data sheet correspond to the company's knowledge and wide experience, they must be considered, under all circumstances, merely as an indication and subject to confirmation only after long-term, practical applications. Therefore, anybody who undertakes to use this product, must ensure beforehand that it is suitable for the intended application and, in all cases, the user is to be held responsible for any consequences deriving from its use.*

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

(GB) A.G. BETA

Any reproduction of texts, photos and illustrations published  
here is prohibited and subject to prosecution

**2046-6-2009**

