



# Mapecoat Finish 50

**Two-component  
aliphatic moisture-  
curing transparent  
polyurethane finish**

## WHERE TO USE

**Mapecoat Finish 50** has been specially developed to form a transparent, semi-gloss, protective, anti-dust, abrasion-resistant film, to be applied directly on both concrete floors and epoxy coatings in **Mapecoat I 500 W** or on cementitious floors realized with **Ultratop**.

## Some application examples

- Anti-dust and non-slip finish for concrete floors and **Ultratop** floors.
- Final treatment for absorbent resin surface finishes such as **Mapecoat I 500 W** applied to industrial concrete floors for warehouses, supermarkets, the food, chemical, engineering and pharmaceutical industries, hospitals, exhibition centres and showrooms.

## TECHNICAL CHARACTERISTICS

**Mapecoat Finish 50** is a semi-gloss, two-component finish. It is based on aliphatic, non-saponifying, solvent-free resins which reticulate thanks to the humidity in the surrounding air and which do not yellow, developed in the MAPEI R&D Laboratories.

**Mapecoat Finish 50** may be applied with a roller, a brush, by spraying with compressed air or airless in layers from 60 µm to 100 µm. When it has set, an extremely hard-wearing layer is formed. If a non-slip finish is required, **Mapecoat Finish 50** may be mixed with 5-10% by weight of **Mapecoat Filler**.

**Mapecoat Filler** is made up of micrometric-fillers of extremely hard-wearing material.

When **Mapecoat Finish 50** is applied directly onto the concrete substrate, it gives a darker wet-look effect to the support.

**Mapecoat Finish 50** complies with the principles defined in EN 1504-9 standards (*"Products and systems for protecting and repairing concrete structures. Definitions, requirements, quality control and conformity assessment. General principles for the use and application of systems"*), and the requirements of EN 1504-2 (*"Protection systems for concrete surfaces"*) for class: products for protecting surfaces - coating (C) - moisture control (MC) + increasing resistivity by limiting moisture content (IR).

## RECOMMENDATIONS

Do not apply **Mapecoat Finish 50** to:

- wet or damp surfaces;
- dusty, crumbly or uneven surfaces;
- if applied after 20 minutes from the mix of the two components, variations of the shiny effect can occur.

Apply **Mapecoat Finish 50**:

- homogeneously and in a uniform thickness;
- with a medium or long-haired roller on clean concrete substrates;
- with a smooth mohair-type roller on **Mapecoat I 500 W** or **Ultratop**.

TECHNICAL DATA (typical values)			
<b>PRODUCT IDENTITY</b>			
	<b>component A</b>	<b>component B</b>	
<b>Colour:</b>	transparent	transparent	
<b>Appearance:</b>	opalescent liquid	clear liquid	
<b>Density (EN ISO 2811-1) (g/cm<sup>3</sup>):</b>	1.13	0.98	
<b>Brookfield viscosity (EN ISO 3219) (mPa·s):</b>	210	50	
<b>Maximum COV content according to 2004/42/EC:</b>	max 0.5		
<b>APPLICATION DATA (at +23°C - 50% R.H.)</b>			
<b>Mixing ratio:</b>	component A : component B = 100 : 3.33		
<b>Colour of the mix:</b>	transparent		
<b>Consistency of the mix:</b>	fluid		
<b>Dry solids content (%):</b>	98		
<b>Density of the mix (kg/m<sup>3</sup>):</b>	1,140		
<b>Density of the mix + Mapefloor Filler (kg/m<sup>3</sup>):</b>	1,180		
<b>Viscosity of the mix (mPa·s):</b>	195		
<b>Viscosity of the mix + Mapefloor Filler (mPa·s):</b>	235		
<b>Pot life (EN ISO 9514):</b>	120 minutes		
<b>Temperature of the surface:</b>	from +8°C to +35°C		
<b>FINAL PERFORMANCES</b>			
<b>Buchholz hardness (after 7 days at +23°C):</b>	90		
<b>Dust dry (at +23°C and 50% R.H.):</b>	6 hours		
<b>Set to light foot traffic (at +23°C and 50% R.H.):</b>	24 hours		
<b>Complete setting time:</b>	7 days		
<b>Taber Test (after 7 days at +23°C and 50% R.H., 1,000 cycles/1,000 g, CS 17 grinder) (mg):</b>	20		
<b>Mapefloor Finish 50 - Performance characteristics for CE certification according to EN 1504-2 - Tab. ZA 1.e. (coating C, principles MC - IR)</b>			
Performance characteristics	Test method according to UNI EN 1504-2	Requirements	Performance of product
<b>Permeability to water vapour:</b>	EN ISO 7783-2	Class I $s_D < 5$ m Class II $5 \text{ m} \leq s_D \leq 50$ m Class III $s_D > 50$ m	Class I (average $s_D = 0.59$ m)
<b>Capillary absorption and permeability to water:</b>	EN 1062-3	$w < 0.1 \text{ kg/m}^2 \cdot \text{h}^{0.5}$	average $w = 0.022 \text{ kg/m}^2 \cdot \text{h}^{0.5}$
<b>Direct traction adherence test. Reference substrate: MC (0.40) as specified in EN 1766, curing time 7 days:</b>	EN 1542	Average (N/mm <sup>2</sup> ) <b>Cracking or flexible systems</b> with no traffic: $\geq 0.8$ (0.5) with traffic: $\geq 1.5$ (1.0) <b>Rigid systems</b> with no traffic: $\geq 1.0$ (0.7) with traffic: $\geq 2.0$ (1.0)	3.5 N/mm <sup>2</sup>
<b>Reaction to fire after application:</b>	EN 13501-1	Euroclasses	B <sub>fl</sub> -s1

The product is sensitive to atmospheric humidity - a filmy layer may be formed which alters the material's adherence and opacity.

It is recommended not to mix more than one pack of **Mapefloor Finish 50** in a single container.

## **APPLICATION PROCEDURE**

### **Preparation of the substrate**

**Mapefloor Finish 50** must be applied on **Mapefloor I 500 W** only if the coating is perfectly dry and set.

Concrete substrates must be clean, free of oil and grease and any other uneven or loose parts.

When **Mapefloor Finish 50** is applied on **Ultratop**, abrade the surface of the **Ultratop** beforehand using a fine-mesh sander or 100-grain sandpaper. Vacuum off all remaining dust.

### **Preparation of the product**

**Mapefloor Finish 50** is made up of two components in pre-dosed quantities. Preparation should be carried out as follows: pour all the contents of component B into the container with component A. After closing the container, mix the two components together by simply shaking the package for one minute.

### **Non-slip treatment**

If a non-slip effect to **Mapefloor Finish 50** is required, add 5-10% by weight of **Mapefloor Filler**, using a blender, while stirring slowly. Keep stirring for a few minutes until a completely homogenous mix is obtained. In this case we recommend that the product is stirred continuously to prevent separation of the filler.

### **Application of the product**

**Mapefloor Finish 50**, whether in the smooth form or with the non-slip additive, is applied in the same way, by using a smooth or medium haired roller on concrete support materials (if used for impregnating) or with a smooth mohair-type roller on **Mapefloor I 500 W** or **Ultratop**.

2 days after application, and at a temperature of +23°C, surfaces with **Mapefloor Finish 50** are ready for walking or driving on.

### **Cleaning**

Tools used for the preparation and application of **Mapefloor Finish 50** must be cleaned immediately after use with ethanol. Once the product has set, it may only be removed by mechanical means.

## **CONSUMPTION**

**On coatings carried out with Mapefloor**

**I 500 W** or **Ultratop**:

0.06-0.100 kg/m<sup>2</sup> per coat.

**On concrete floors:**

0.1-0.2 kg/m<sup>2</sup> per coat according to the absorbency.

## **PACKAGING**

Available in 5 kg packages (A+B):

- component A = 4.840 kg;

- component B = 0.160 kg.

## **STORAGE**

The product can be stored for 12 months in its original packaging in a dry place and at a temperature of at least +5°C.

## **SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION**

**Mapefloor Finish 50** (components A and B) is hazardous; component B may cause serious injury if swallowed. Contact with the skin or inhalation of vapours may also cause allergic reactions in those persons sensitive to such products. Use gloves and appropriate personal protection measures; avoid the formation of aerosols. The product is harmful to aquatic life and must not be dispersed into 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](http://www.mapei.com)**

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

# Mapefloor Finish 50



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## EN 1504-2 - 1305-CPD-0616

Surface protection products - Coating  
Moisture control and increasing resistivity

Permeability to water vapour:	Class I
Capillary absorption and permeability to water:	$< 0.1 \text{ kg}\cdot\text{m}^{-2}\cdot\text{h}^{-0.5}$
Tensile adherence strength:	$\geq 1.5 \text{ N/mm}^2$
Reaction to fire:	B <sub>fl</sub> -s1
Hazardous substances:	complies with 5.3

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