



Mapecfloor Finish 54 W/S

Two-component, aliphatic, transparent, satin polyurethane finish in water dispersion with no NMP for protecting resin systems



WHERE TO USE

Due to its excellent characteristics and extremely simple installation procedure, **Mapecfloor Finish 54 W/S** is recommended as a finishing coat to improve resistance to wear and abrasion on floors made using the **Mapecfloor System**.

Some application examples

- Transparent finishing coat on resin floors such as **Mapecfloor System 33** and **Mapecfloor System 53**.

TECHNICAL CHARACTERISTICS

Mapecfloor Finish 54 W/S is a two-component, aliphatic, transparent, satin polyurethane finishing product in water dispersion with no NMP and a very low emission level of volatile organic compounds (VOC) which is highly resistant to wear and abrasion, according to a formula developed in the MAPEI R&D laboratories.

Mapecfloor Finish 54 W/S is also highly resistant to limited periods of contact with medium-concentrate acid and basic solutions and with mineral oils.

Mapecfloor Finish 54 W/S is applied with a roller or by *airless* spray in coats from 60 to 100 microns thick. Once the product has hardened, treated surfaces have better surface mechanical characteristics, in particular lower absorption and higher resistance to wear and streaking.

Mapecfloor Finish 54 W/S has the following characteristics:

- excellent resistance to abrasion to the marks left by rubber wheels;
- available in the transparent satin version.

RECOMMENDATIONS

- Do not apply the product at a rate of more than 100 g/m² in a single coat. Higher rates may cause defects in the coating.
- Do not apply **Mapecfloor Finish 54 W/S** on dusty, crumbling or irregular substrates.
- Do not apply **Mapecfloor Finish 54 W/S** on wet surfaces or surfaces soaked in oil or grease.
- If the finish is applied in several coats, do not exceed the maximum time permitted before painting to guarantee a good bond with the coating. If this time is exceeded, the surface must be mechanically roughened before applying the next coat.

APPLICATION PROCEDURE

Preparation of the substrate

Resin coatings:

Mapecfloor Finish 54 W/S may be applied on both new and old resin coatings. If the product is applied on new resin coatings, the resin must be perfectly dry, well-cured and applied within the last 24 hours. If more than 24 hours have elapsed since application, the surface of the resin must be sanded with a

TECHNICAL DATA (typical values)				
PRODUCT IDENTITY				
	component A	component B		
Colour:	transparent	transparent		
Appearance:	liquid	liquid		
Density (g/cm ³):	1.03	1.12		
Brookfield Viscosity (mPa·s):	90 (# 1 - 20 rpm)	390 (# 1 - 10 rpm)		
Dry solid content (%):	27	70		
APPLICATION DATA (at +23°C - 50% R.H.)				
Maximum dilution rate:	10% with clean water			
Mixing ratio:	comp A : comp B = 10 : 1			
Colour of mix:	transparent			
Consistency of mix:	fluid			
Dry substances content (3 hours - 105°C) (%):	33			
Density of mix (kg/m ³):	1,040			
Viscosity of mix (mPa·s):	190 (# 1 - 20 rpm)			
Workability time:	15 ÷ 20 min. at +23°C			
Surface temperature:	from +12°C to +30°C			
Waiting time before painting:	from 3 to 5 hours			
Time before sanding:	after 12 hours			
Set to the touch:	40 minutes			
FINAL PERFORMANCE				
Abrasion resistance (Taber test) (CS 17 disk - 1000 g - 1000 revs) (mg):	22			
Dust dry at +23°C and 50% R.H.:	40 minutes			
Set to light foot traffic at +23°C and 50% R.H.:	6-7 hours			
Final hardening time:	12 hours at +23°C			
Gloss factor:	50			
MAPEFLOOR FINISH 54 W/S on Mapefloor System 33				
Performance characteristic	Test method	Requirements according to UNI EN 13813 for synthetic resin screeds	Performance of product	Class
BCA wear resistance (µm):	UNI EN 13892-4	≤ 100	10	AR0.5
Bond strength (N/mm ²):	UNI EN 13892-8; 2004	≥ 1.5	3.43	B2.0
Impact strength (Nm):	UNI EN ISO 6272	≥ 4	20	IR20
Reaction to fire:	EN 13501-1	from A ₁ to F _{fl}	B _{fl} -s1	B _{fl} -s1
Emission of corrosive substances:		Type of resin		SR
MAPEFLOOR FINISH 54 W/S on Mapefloor System 53				
Performance characteristic	Test method	Requirements according to UNI EN 13813 for synthetic resin screeds	Performance of product	Class
BCA wear resistance (µm):	UNI EN 13892-4	≤ 100	0	AR0.5
Bond strength (N/mm ²):	UNI EN 13892-8; 2004	≥ 1.5	3.14	B2.0
Impact strength (Nm):	UNI EN ISO 6272	≥ 4	20	IR20
Reaction to fire:	EN 13501-1	from A ₁ to F _{fl}	B _{fl} -s1	B _{fl} -s1
Emission of corrosive substances:		Type of resin		SR
Permeability to water vapour:	EN ISO 7783-1-2	Class I: S _D < 5 m (permeable to water vapour) Class II: 5 m ≤ S _D ≤ 50 m Class III: S _D > 50 m (not permeable to water vapour)	S _D = 1.69 m	Class I

single-head brush with fine sandpaper (80-100 grain) or an abrasive pad to guarantee that the product bonds well.

If **Mapefloor Finish 54 W/S** is applied on old resin coatings, the surface of the resin must be perfectly clean and free of oil, grease and/or any other type of pollutant. Sand the entire surface of the resin to guarantee that the product forms a good bond with the substrate.

Preparation of the product

Mapefloor Finish 54 W/S is a polyurethane finishing product made up of two pre-dosed components.

To prepare the product, mix component A with component B at a ratio of 10:1 with a low-speed electric mixer until they are thoroughly blended.

We recommend preparing only the amount which may be applied within the maximum workability time.

If a non-slip finish is required on the

Mapefloor Finish 54 W/S, add **Mapefloor Filler** while mixing continuously at a rate of 5-10% by weight.

Application of the product

Apply **Mapefloor Finish 54 W/S** in an even coat using a short-haired roller (such as *mohair*) or by *airless* spray on the resin coating.

If a second coat is required, it may be applied after sanding the first coat.

Cleaning

Tools used to prepare and apply **Mapefloor Finish 54 W/S** must be cleaned immediately after use with plenty of running water. Once hardened, the product may only be removed mechanically.

CONSUMPTION

0.1-0.2 kg/m² according to the grade of finish required for the coating material.

PACKAGING

Component A: 5.0 litres.
Component B: 0.5 litres.

STORAGE

Store the product in a dry, covered place at a temperature of between +12°C and

+25°C. The shelf-life of the product in these conditions is 12 months.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Mapefloor Finish 54 W/S component A is not considered as dangerous according to the current regulation regarding the classification of mixtures.

Mapefloor Finish 54 W/S component B may irritate the respiratory apparatus and may cause sensitisation if it comes into contact with the skin. When applying the product, we recommend using protective clothing, gloves and safety goggles and to work only in well-ventilated areas. If the product comes into contact with the eyes or skin, wash immediately with plenty of clean water and seek medical attention.

For further and complete information about the safe use of our product please refer to the latest version of our 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 Finish 54 W/S



MAPEFLOOR FINISH 54 W/S - Chemical resistance table

Chemical agent	Temperature	Contact time	Level of chemical resistance 1 = minimum 5 = maximum
Acetone	20°C	10 seconds	5
Vinegar	20°C	1 hour	5
Ammoniac (1%)	20°C	1 hour	5
Ammoniac (10%)	20°C	1 hour	5
Ethyl alcohol (90%)	20°C	1 hour	4
Ethyl alcohol (10%)	20°C	16 hours	5
Coffee	40°C	16 hours	3
Extra virgin oil	20°C	16 hours	5
Distilled water	20°C	16 hours	5
Water and salt (15%)	20°C	16 hours	5

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2100-9-2013