

Mapecolor Finish 54 W/S [NA]

Two-Component, Clear, Semi-Gloss, Aliphatic Polyurethane Coating



NORTH AMERICA [NA]

FOR PROFESSIONAL USE ONLY

DESCRIPTION

Mapecolor™ Finish 54 W/S [NA] is a two-component, aliphatic polyurethane coating in water dispersion with a semi-gloss finish that is clear or colored. Mapecolor Finish 54 W/S [NA] provides a high-performance finish on general-service resinous flooring products and Ultratop® [NA] systems.

FEATURES AND BENEFITS

- Low-odor
- Fast-curing with a quick turnaround time
- Easy to clean and maintain
- A non-slip finish may be obtained by adding Mapecolor Filler [NA].
- Can be tinted to match any RAL color

WHERE TO USE

- Healthcare facilities
- Commercial and general-service industrial environments
- Department stores
- Government buildings
- Colleges and universities

LIMITATIONS

- Do not apply *Mapefloor Finish 54 W/S* [NA] on substrates that have not received adequate preparation.
- Do not dilute *Mapefloor Finish 54 W/S* [NA] with solvents.
- Do not apply *Mapefloor Finish 54 W/S* [NA] on dusty or weak substrates.
- Do not apply *Mapefloor Finish 54 W/S* [NA] on substrates that have oil, grease or dirt.
- Do not mix partial quantities of the components; otherwise, the product may not perform adequately.
- Do not expose the mixed product to sources of heat.
- The coating may change color if it is exposed to aggressive chemicals. A change of color, however, does not mean that the chemicals have damaged the coating. If corrosive substances come into contact with *Mapefloor Finish 54 W/S* [NA], remove them immediately.
- Waiting/recoat times: At least 6 hours and up to 24 hours.
- Use only between the ambient and substrate temperatures of 46°F and 95°F (8°C and 35°C).
- Do not use on exterior or on-grade surfaces.
- Ensure that *Mapefloor Finish 54 W/S* [NA] is protected from water and condensation for at least 24 hours after application.
- Ensure that the temperature of the concrete is at least 5 degrees Fahrenheit (2.8 degrees Celsius) above the dew point during the application and curing of *Mapefloor Finish 54 W/S* [NA].
- Do not mix partial quantities of Parts A and B.
- When the product is applied directly to concrete substrates, conduct appropriate methods for testing calcium chloride (ASTM F1869) and methods for testing surface moisture content (ASTM F2170). *Mapefloor Finish 54 W/S* [NA] can be applied when an effective moisture vapor retarder exists under the concrete (for slab on or below grade), and at MVER values at no more than 5 lbs. per 1,000 sq. ft. (2.27 kg per 92.9 m²) and relative humidity values at no more than 85% with records confirming that the moisture is still dissipating (that is, moisture levels are dropping).
- Do not apply in areas when the ambient relative humidity is greater than 65%.

SURFACE PREPARATION

New resin coatings

Surface must be hard and dry and have been applied within 24 hours of applying *Mapefloor Finish 54 W/S* [NA]. If the recoat time has passed, the existing topcoat surface must be mechanically abraded, vacuumed with a brush attachment and wiped with a lint-free, non-oily, solvent-dampened cloth such as an acetone or MEK, before *Mapefloor Finish 54 W/S* [NA] can be applied.

Old resin coatings

Old resin coatings must be thoroughly clean and free of any traces of oil, grease or any contaminant that may reduce or prevent proper adhesion. Abrasion of the entire surface must be done to guarantee sufficient adhesion between product and the substrate.

Note: MAPEI strongly recommends that conducting a trial application to determine compatibility and acceptable performance of *Mapefloor Finish 54 W/S* [NA] with the existing surfaces. Consult MAPEI's Technical Services Department for installation recommendations regarding substrates and conditions not listed.

MIXING

Before product use, take appropriate safety precautions. Refer to the Safety Data Sheet (SDS) for details.

- Note that all of Part A must be used with all of Part B for the proper product performance.
 - It is recommended to prepare only the quantity that can be applied within the maximum workability time.
 - If a non-slip surface finish is required for *Mapefloor Finish 54 W/S* [NA], add 3% to 5% by weight of *Mapefloor Filler* [NA] while mixing.
1. To ensure that all solids are evenly dispersed, mix Part A of *Mapefloor Finish 54 W/S* [NA] mechanically for about 1 minute.
 2. Pour all of the Part B hardener into the Part A container and mix thoroughly to a smooth, homogeneous consistency.
 3. Do not mix at high speeds or overmix, which can trap air within the mixed material. Use an adequate mixing paddle with a low-speed drill mixer (at 300 to 400 rpm).
 4. During the mixing process, scrape down the sides and bottom of the container to completely mix all of the components.
 5. Apply the mixed *Mapefloor Finish 54 W/S* [NA] within the pot life of 4 hours. Higher ambient and substrate temperatures will reduce the pot life of the mix, while lower temperatures will increase its pot life as well as increase the viscosity and affect coverage.

PRODUCT APPLICATION

1. Apply two coats at 2 to 4 mils (WFT) of *Mapefloor Finish 54 W/S* [NA] with a short-piled lint-free roller (6 mm).
2. When applying with a roller, roll in opposite directions with each successive coat.
3. Two coats of *Mapefloor Finish 54 W/S* [NA] are mandatory if a color version is used. If the time between each coat exceeds 24 hours at 68°F (20°C), lightly sand the surface of the first coat, vacuum with a brush attachment and wipe with a lint-free, non-oily, solvent-dampened cloth before applying *Mapefloor Finish 54 W/S* [NA]. Waiting times are shorter at higher temperatures and longer at lower temperatures.
4. Make sure that application areas are well ventilated with a good amount of air exchange to help the product dry. Do not apply the product at a rate of more than 100 g per m² in a single coat. Higher rates may cause defects in the coating.

CLEANUP

- Tools used to prepare and apply *Mapefloor Finish 54 W/S* [NA] should be cleaned immediately after use with plenty of running water.

STORAGE

- *Mapefloor Finish 54 W/S* [NA] should be stored in a covered, dry area with temperatures between 54°F and 86°F (12°C and 30°C). A shelf life of 1 year can be obtained when stored in these conditions.

Product Performance Properties

at 73°F (23°C) and 50% relative humidity

Laboratory Tests	Results
Tensile strength – ASTM D638	415.16 psi (2.86 MPa)
Elongation – ASTM D638	32.88%
Pull-off strength – ASTM D7234	5.808 n/mm ²
Abrasion resistance – ASTM D4060	
CS17, 1,000 cycles, 2.2 lbs. (1 000 g)	0.12 g
Solids content	~45.78% (mixed)
Viscosity (mixed)	~325 cps
VOC content (SCAQMD Rule 1113 category)	< 350 g/L
Typical VOC content per SCAQMD Rule 1113 testing methods	136 g/L

Application Properties

Dry to touch	~32 minutes
Hard-dry	~4 hours
Full cure	~7 days
Light traffic allowed	~8 hours
Waiting/recoat times	Minimum 6 hours, maximum 24 hours
Pot life	Maximum 4 hours

Approximate Coverage*

per mixed unit

Thickness	Coverage
2 mils	1,770 to 1,775 sq. ft. (164 to 165 m ²)
4 mils	885 to 890 sq. ft. (82.2 to 82.6 m ²)

* Coverage shown is for estimating purposes only. Actual jobsite coverage varies depending on the desired build as well as the profile and porosity of the substrate.

Packaging

Size
<u>Clear</u> Part A: 17.63 lb (8 kg) Part B: 1.77 lb (0.8 kg)
<u>Colored</u> Part A: 19.4 lb (8.8 kg) Part B: 1.77 lb (0.8 kg)

ADDITIONAL INFORMATION

Refer to the Safety Data Sheet (SDS) for specific data related to health and safety as well as product handling.

For information on MAPEI’s commitment to sustainability and transparency, as well as how MAPEI products may contribute to green building standards and certification systems, contact sustainability-durabilite@mapei.com.

WARNING

The test results shown in the TECHNICAL DATA table were obtained in compliance with test methods and curing cycles, if applicable, defined in the industry standards referenced on the Technical Data Sheet. Please note that the use of test procedures or methods other than those indicated in the table could lead to different values and that, in such cases, any liability of our company is excluded.

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement nor replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at www.mapei.com. **ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.**

Before using, the user must determine the suitability of our products for the intended use, and the user alone assumes all risks and liability. **ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**

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For the most current product data and BEST-BACKEDSM warranty information,
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