Planiseal MSP

Moisture-Control Membrane, Adhesive Isolator, Sealer, pH Blocker and Primer

DESCRIPTION

Planiseal® MSP is a two-coat, high-solids, polymer-based adhesive isolator, sealer, moisture-control membrane and self-leveling primer. *Planiseal MSP* protects flooring installations against subfloor moisture and pH in concrete slabs with moisture vapor emission rates (MVERs) up to 15 lbs. (6.80 kg) per ASTM F1869, relative humidity (RH) up to 99% per ASTM F2170 and alkalinity protection up to pH of 12. *Planiseal MSP* eliminates the need for a secondary primer for self-leveling applications.

FEATURES AND BENEFITS

- Colored red to help ensure proper coverage
- Water-based formulation for ease of use, cleanup and storage
- Moisture protection up to 15 lbs. (6.80 kg) MVER and 99% RH
- Provides moisture control, adhesive encapsulation and a primer for self-leveling compounds in one product

INDUSTRY STANDARDS AND APPROVALS

- Living Building Challenge (LBC) Red List Free: This product has been verified per the most current Red List on the LBC's Website.

WHERE TO USE

- For reducing subfloor moisture vapor emissions over concrete slabs
- For providing a pH blocker on concrete slabs with an elevated pH up to pH 12
- For encapsulating non-asbestos types of adhesive residues

- To prime properly prepared cement or wood substrates before the application of self-leveling underlayments
- To block pet urine stains and related odors on wood and concrete substrates from migrating through to new floor-covering installations

LIMITATIONS

- Do not install over substrates containing asbestos.
- Do not apply over standing water.
- Do not use below grade.
- For interior installations only
- Do not use traditional, polymer-modified patching or self-leveling compounds under *Planiseal MSP*. Only moisture-resistant, cement-based materials can be used under *Planiseal MSP*.
- Do not install when the MVER exceeds 15 lbs. per 1,000 sq. ft. (6.80 kg per 92.9 m^2) per 24 hours when using the anhydrous calcium chloride test (per ASTM F1869).
- Do not use when the RH of the concrete slab exceeds 99% (per ASTM F2170).
- Do not use if the pH of the concrete slab is greater than 12.
- Do not use over residues of pressure-sensitive, epoxy or urethane-based adhesives.
- Do not install in areas with known hydrostatic moisture problems.
- All concrete slabs on grade must have an effective, functioning vapor barrier in place below the slab.
- Use only when the substrate temperature is between 50°F and 90°F (10°C and 32°C).
- Do not install unless the temperature of the prepared concrete slab is at least 5 degrees F (2.8 degrees C) above the dew point, to avoid condensation.

Note: *Planiseal MSP* is not an equal replacement for a moisture barrier meeting the ASTM F3010-13 standard.

SUITABLE SUBSTRATES

- Absorbent new/existing concrete on or above grade at least 14 days old. A concrete substrate must have some open porosity, with an International Concrete Repair Institute (ICRI) concrete surface profile (CSP) of at least #1.
- Carpet adhesive and asphalt cutback adhesive residue that have been completely scraped to the subfloor with only minor stains remaining
- Cement terrazzo
- Exterior-rated, cement-based, self-leveling underlayments and patching compounds
- Exterior-grade plywood, Group 1, CC type; other approved wood underlayments (per the flooring manufacturer's recommendations) as sealer/primer only. *Planiseal MSP*'s moisture-control properties do not apply over wood underlayments.

Consult MAPEI's Technical Services Department for installation recommendations regarding substrates and conditions not listed.

SURFACE PREPARATION

- To determine if a slab is absorbent, perform a water droplet test by placing several drops of water on the concrete surface. If the water beads, the surface is not absorptive and requires additional preparation to achieve acceptable absorbency. If the water wets out, darkens or penetrates the concrete within 1 minute,

the surface is ready to receive *Planiseal MSP*. A bond test is always encouraged to determine complete compatibility.

- All substrates must be structurally sound, surface-dry, solid and stable.
- Substrates should be clean and free of dust, dirt, oil, grease, paint, curing agents, concrete sealers, loosely bonded toppings, loose particles, and any other substance or condition that may prevent or reduce adhesion.

See the "Surface Preparation Requirements" reference guide in the Floor Covering Installation Systems section of MAPEI's Website.

MIXING

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

- Ready to use; no mixing is necessary.
- Settling may occur. If needed, gently stir the product until it is smooth and consistent.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

1. Pour *Planiseal MSP* directly onto the substrate surface.
2. Smooth out the product with a well-saturated 1/4" (6 mm) nap roller, using even and consistent strokes to achieve 100% coverage.
3. Allow the first coat to completely dry (for about 1 to 3 hours).
4. Apply the second coat, rolling it perpendicular to the direction of the first coat.
5. Allow the second coat of *Planiseal MSP* to completely dry (for at least 4 hours) before application of patches, adhesives or self-leveling underlayments.
6. Protect the application area from traffic and other trades until the final installation of flooring.

Note: Always install *Planiseal MSP* and then apply patching compounds (unless the compounds are exterior-rated and approved for use under moisture-controlling systems).

Drying time of *Planiseal MSP* will vary based on the substrate's porosity and moisture levels as well as jobsite conditions. Adhesives and patching products will require extended drying times when applied over *Planiseal MSP*.

CLEANUP

- Clean tools and hands with water while the product is still fresh/wet.

PROTECTION

- Protect the application area from traffic and other trades until the final installation of flooring.

Product Performance Properties

Laboratory Tests	Results
Solids content	53% to 61%
VOCs (Rule #1168 of California's SCAQMD)	< 50 g per L
Flash point (Tag)	> 200°F (93°C)
pH	8 to 9
Density	9.2 to 9.3 lbs. per U.S. gal. (1.1 to 1.2 g per mL)

Shelf Life and Product Characteristics

Shelf life	1 year when stored in original, unopened packaging at 73°F (23°C)
Polymer type	Styrene acrylic
Physical state	Liquid
Color	Red

Protect containers from freezing in transit and storage. Provide for heated storage on site and deliver all materials at least 24 hours before work begins.

Application Properties

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

Substrate temperature range for application	50°F to 90°F (10°C to 32°C)
Drying time of first coat (8 to 10 mils in wet film thickness or WFT)	1 to 3 hours
Drying time of second coat (6 to 8 mils WFT)	4 hours

Packaging

Size
Pail: 4 U.S. gals. (15.1 L)

Approximate Coverage*

per 4 U.S. gals. (15.1 L)

Flooring Type	Thickness	Coverage
Smooth, porous concrete	Double coat with 1/4" (6 mm) nap roller for a total WFT of 14 to 18 mils	500 to 700 sq. ft. (46.5 to 65.0 m^2)
Rough, porous concrete	Double coat with 1/4" (6 mm) nap roller for a total WFT of 14 to 18 mils	400 to 600 sq. ft. (37.2 to 55.7 m^2)

** Coverage shown is for estimating purposes only. Actual jobsite coverage may vary according to substrate conditions.*

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.

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-BACKED^{SM} warranty information, visit www.mapei.com.

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