

# Ultrabond ECO MS 4 LVT

Professional, Hybrid-Polymer Adhesive for Resilient  
Flooring



NORTH AMERICA [NA]

## DESCRIPTION

*Ultrabond ECO*<sup>®</sup> *MS 4 LVT* [NA] is a moisture-curing, one-component, silane-modified, hybrid-polymer adhesive specifically designed for the direct bonding of vinyl and rubber flooring in interior applications.

## FEATURES AND BENEFITS

- High moisture resistance, requiring no moisture testing
- One-component formulation
- Easy to apply and quick-curing
- Once cured, resists indentation from heavy static and rolling loads

## INDUSTRY STANDARDS AND APPROVALS

### Green certifications

- 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

- Use to install LVT as well as vinyl and rubber sheet, tile and plank flooring
- Interior residential applications (multi-family and single-family homes)
- Interior commercial applications (office buildings, hotel rooms/hallways and restaurant dining areas)
- Interior heavy-commercial applications (hotel lobbies, convention centers, airports and department stores)
- Interior institutional applications (hospitals, schools, universities, libraries and government buildings)

## LIMITATIONS

- Do not install over any substrates containing asbestos.
- Do not use for exterior installations.
- Do not apply over any adhesive residues.
- Install only in areas recommended by the flooring manufacturer.
- Do not install if standing water is present.
- Do not use in areas with known hydrostatic pressure, osmotic blistering or alkali silica reaction conditions.
- Do not install when the moisture vapor emission rate (MVER) exceeds 25 lbs. per 1,000 sq. ft. (11.3 kg per 92.9 m<sup>2</sup>) per 24 hours, when using the anhydrous calcium chloride test (ASTM F1869).
- Do not install when the relative humidity (RH) of the concrete slab exceeds 100% (ASTM F2170).
- Do not install if the pH of the substrate exceeds 14.
- Use only when the substrate temperature is between 50°F and 90°F (10°C and 32°C), and when the ambient RH is between 20% and 80%.
- Do not use as a leveling, patching or subfloor repair material.
- Do not install over epoxy moisture barriers.

## SUITABLE SUBSTRATES

- Existing, well-bonded tile and stone
- Existing, well-bonded resilient flooring
- Porous concrete that has been placed in strict accordance with ASTM F710 or ACI 302.2-06, which includes the requirement of an under-slab moisture vapor barrier
- Cement terrazzo
- High-moisture-resistant, cement-based, self-leveling underlayments and patching compounds
- Exterior-grade plywood and other approved wood underlayments (per the flooring manufacturer's recommendations)
- Dry and primed gypsum underlayments that meet ASTM F2419 requirements for compressive strength
- Radiant-heating systems that have been properly installed
- MAPEI waterproofing membranes

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

## SURFACE PREPARATION

- All substrates must be interior, structurally sound, surface-dry, solid and stable.
- Thoroughly clean all surfaces of any substance that could interfere with the bond of the installation material, including dirt, paint, tar, asphalt, wax, oil, grease, latex compounds, sealers, curing compounds, form-release agents, laitance, loose toppings, foreign substances and adhesive residues.

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, with no mixing necessary

## PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

1. Select the appropriately notched trowel (see the “Approximate Coverage” section below).
2. Spread adhesive evenly over the substrate, keeping the trowel at a 45-degree angle to the surface.
3. Only apply as much adhesive as can be installed over within 20 to 30 minutes.
4. Install and roll flooring in strict accordance with the flooring manufacturer’s written instructions.
5. Adhesive transfer to the backing should be confirmed periodically by lifting the flooring material.
6. Use walk boards over freshly installed flooring to avoid adhesive displacement.

Note that extremely low ambient/air RH will extend the adhesive’s curing time. Add humidity into the environment using humidifiers or lightly mist the substrate or adhesive with water. (Do not puddle water.)

## CLEANUP

- Whether the adhesive is fresh/wet or dry, adhesive smudges can be cleaned from the flooring material’s surface as well as from tools with a clean, white cloth.

## PROTECTION

- Protect the installation from light traffic and water exposure for at least 5 hours, and from heavy traffic for at least 24 hours.
- Building owners should be advised of the flooring manufacturer’s guidelines for climate control settings (temperature and humidity). These conditions must be monitored and kept constant in order to ensure the overall performance and long-term success of the installation.

**Product Performance Properties**

| Laboratory Tests                         | Results                                |
|------------------------------------------|----------------------------------------|
| Solids content                           | 100%                                   |
| VOCs (Rule #1168 of California’s SCAQMD) | 0 g per L                              |
| Density                                  | 11.4 lbs. per U.S. gal. (1.5 g per mL) |
| Flash point (Tag)                        | > 200°F (93°C)                         |

**Shelf Life and Application Properties**

|                              |                                                                    |
|------------------------------|--------------------------------------------------------------------|
| Shelf life                   | 2 years when stored in original, unopened packaging at 73°F (23°C) |
| Polymer type                 | Hybrid-polymer                                                     |
| Color                        | White                                                              |
| Storage conditions           | 50°F to 90°F (10°C to 32°C)                                        |
| Ready for light foot traffic | 5 hours                                                            |
| Ready for heavy traffic      | 24 hours                                                           |

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% RH

| Flash time*     | Working time**   | Adjustability time*** |
|-----------------|------------------|-----------------------|
| 5 to 10 minutes | 20 to 30 minutes | 30 to 45 minutes      |

\* Flash time is the recommended amount of time for a freshly applied adhesive to remain exposed to the air before the installation of a floor covering.

\*\* Working time is the maximum amount of time that an adhesive can remain exposed to the air and still effectively bond to the floor covering.

\*\*\* Adjustability time is the window of time during which the floor covering can be repositioned without compromising the bond of the adhesive.

Flash time, working time and adjustability time may vary based on temperature, humidity, substrate porosity, trowel size and jobsite conditions.

**Packaging**

| Size                        |
|-----------------------------|
| Pail: 4 U.S. gals. (15.1 L) |
| Pail: 1 U.S. gal. (3.79 L)  |



## Approximate Coverage†

| Typical Trowel                                  | Coverage                                                             |
|-------------------------------------------------|----------------------------------------------------------------------|
| U-notch, 1/16" x 1/32" x 1/32" (1.5 x 1 x 1 mm) | 185 to 245 sq. ft. per U.S. gal. (17.2 to 22.7 m <sup>2</sup> per L) |

† Trowel dimensions are depth/width/space. Coverage shown is for estimating purposes only. Actual jobsite coverage may vary according to substrate conditions, type of trowel used and setting practices.

## ADDITIONAL INFORMATION

Refer to the 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\_USA@mapei.com (USA) or sustainability-durabilite@mapei.com (Canada).

### 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](http://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.**

## CONTACT INFORMATION

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For the most current product data and BEST-BACKED<sup>SM</sup> warranty information, visit [www.mapei.com](http://www.mapei.com).

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