

DESCRIPTION

Ultrabond ECO 420 is a proprietary, water-based adhesive formulation designed for both indoor and outdoor carpet. Ultrabond ECO 420 offers high-moisture-resistant characteristics and excellent bond properties for interior and exterior broadloom carpet installations. Ultrabond ECO 420 is also perfectly suited to bond reground rubber underlayments such as Mapesonic™ RM for ceramic tile installations. Due to its unique formulation, it can be installed without the need for moisture testing.

FEATURES AND BENEFITS

- Provides a strong, secure bond to indoor and outdoor broadloom carpet
- Fast-curing; moisture-resistant when dry
- Nonflammable and suitable for use in enclosed spaces

WHERE TO USE

- Interior and exterior residential and commercial environments
- Approved for interior and exterior use with dimensionally stable indoor and outdoor rubber, polypropylene (ActionBac) and closed-cellular urethane foam-backed carpeting
- Approved for interior installation of *Mapesonic RM* rubber membrane to concrete or wood before the installation of tile or stone

LIMITATIONS

- Do not install over substrates containing asbestos.
- Do not use to install nonporous floor coverings over nonporous surfaces.
- Do not use to install solid vinyl flooring.

- Do not use to install vinyl-backed carpet.
- Do not apply over any adhesive residues, including cutback adhesive.
- Use only when the substrate temperature is between 50°F and 90°F (10°C and 32°C).
- Do not use over asphalt roofing.

SUITABLE SUBSTRATES

- Exterior and marine-grade plywood
- Pressure-treated lumber
- Concrete
- Exterior-approved patching compounds and concrete repair products
- Cement-based self-leveling underlayments and patching compounds (interior use only)
- Asphalt paving (clean, secure and cured)

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

SURFACE PREPARATION

- All substrates must be structurally sound, dry, solid and stable.
- Substrate should be clean and free of dust, dirt, oil, grease, paint, curing
 agents, concrete sealers, loosely bonded toppings, loose particles, old
 adhesive residues, and any other substance or condition that may prevent
 or reduce adhesion. All surfaces must be level, even, flat and smooth.

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.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

- 1. Select the appropriate notched trowel (see the "Approximate Coverage" chart below).
- 2. Spread adhesive evenly over the subfloor, keeping the trowel at a 45-degree angle to the subfloor.
- For porous substrates, install the flooring material into the adhesive while it is still wet. For porous-backed material over nonporous substrates, allow 20 minutes of drying time for the adhesive to build tack before placing flooring material.
- 4. Install flooring.
- 5. Periodically confirm adhesive transfer to the backing by lifting the flooring material.
- 6. Roll the flooring with the recommended-weight roller across the width and length of the flooring surface.

CLEANUP

- Promptly clean any adhesive smudges from the flooring material's surface with water while the adhesive is still fresh/wet.
- Clean tools with water while the adhesive is still fresh/ wet.
- Clean with mineral spirits once the adhesive has dried.
 Use caution with mineral spirits, which may be harmful to some materials.

PROTECTION

- Protect from heavy traffic for at least 24 hours.
- Protect from rain for 72 hours.



Product Performance Properties

Laboratory Tests	Results
Solids content	68% to 72%
VOCs (Rule #1168 of California's SCAQMD)	19 g per L
VOCs (Section 01350 of California's CDPH)	Passed
рН	9 to 10
Viscosity	60,000 to 120,000 cps
Flash point (Seta flash)	> 212°F (100°C)

ECO 420

Shelf Life and Product Characteristics before mixing

Shelf life	2 years when stored in original, unopened packaging at 73°F (23°C)
Polymer type	SBR
Consistency	Buttery
Color	Light tan

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

Open time	20 to 30 minutes	
Drying time	24 hours	
Application temperature range	50°F to 90°F (10°C to 32°C)	

Packaging

Size	
Pail: 1 U.S. qt. (946 mL)	
Pail: 1 U.S. gal. (3.79 L)	
Pail: 4 U.S. gals. (15.1 L)	

Approximate Coverage*

Flooring Type	Typical Trowel	Coverage
Smooth-backed carpet	1/8" x 1/8" x 1/8"	85 to 95 sq. ft. per U.S. gal.
	(3 x 3 x 3 mm), U-notched	(2.08 to 2.33 m ² per L)
Rough-backed carpet	3/16" x 1/8" x 1/8"	40 to 50 sq. ft. per U.S. gal.
	(4.5 x 3 x 3 mm), V-notched	(0.98 to 1.22 m ² per L)
Mapesonic RM	3/32" x 3/32" x 3/32"	140 to 150 sq. ft. per U.S. gal.
	(2.5 x 2.5 x 2.5 mm), V-notched	(3.43 to 3.67 m² per L)

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











RELATED DOCUMENTS

Reference Guide: "Surface preparation requirements" for floor-covering installation systems*

* At www.mapei.com

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. 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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