

Ultrabond Sport PU 1K

Fast-Setting Urethane Adhesive for Recycled-Rubber Sports Flooring



DESCRIPTION

Ultrabond® Sport PU 1K is a one-component, moisture-curing, urethane adhesive specifically designed for bonding reground-rubber flooring in interior and exterior applications. Its unique formulation is perfectly suited for reground-rubber sports flooring, providing an aggressive and durable bond. *Ultrabond Sport PU 1K* is designed to provide tack and early green strength to keep seams tight and avoid the need for weights.

FEATURES AND BENEFITS

- Suitable for all exercise equipment areas
- High moisture resistance
- Early tack for ease of installation
- Low VOCs

WHERE TO USE

- Interior and exterior installations of reground-rubber sports flooring
- Professional and educational athletic and fitness centers
- Commercial and residential installations of reground-rubber sports flooring and reground-rubber underlayments

LIMITATIONS

- Do not install over any substrates containing asbestos.
- Do not apply over any adhesive residues, including cutback adhesive.
- Do not install in areas not recommended by the floor-covering manufacturer.

- Do not install in areas with known hydrostatic moisture, osmotic blistering or alkali silica reaction conditions.
- Use only when the substrate temperature is between 50°F and 90°F (10°C and 32°C), and when the ambient relative humidity (RH) is between 30% and 80%.
- Do not install when the moisture vapor emission rate (MVER) exceeds 15 lbs. per 1,000 sq. ft. (6.80 kg per 92.9 m²) per 24 hours, when using the anhydrous calcium chloride test (ASTM F1869).
- Do not install when the RH of the concrete slab exceeds 95%, per ASTM F2170.
- Do not install if the pH of the substrate exceeds 12.0.
- Do not use as a leveling, patching or subfloor repair material.

SUITABLE SUBSTRATES

- Fully cured concrete at least 28 days old (see the “Limitations” section above)
- Existing and well-bonded resilient flooring
- Existing and well-bonded ceramic and porcelain tile
- Cement terrazzo
- Cement-based self-leveling underlayments and patching compounds with high moisture resistance
- Exterior-grade plywood and other approved wood underlayments per the flooring manufacturer’s recommendations
- Properly primed gypsum underlayments that meet the requirements for compressive strength per ASTM F2419
- Acrylic, epoxy and polyurethane moisture-reducing or moisture-barrier membranes
- Radiant-heat systems that have been properly installed per the flooring manufacturer’s recommendations

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

SURFACE PREPARATION

- All substrates must be prepared in accordance with the sports-flooring manufacturer for the type of intended use and must comply with current regulations or standards.
- All substrates must be structurally sound, dry, solid and stable.
- The 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. If the surface contains these substances, they must be mechanically removed. Do not use chemical means.
- All surfaces must be level to 3/16" in a 10-foot span (4.5 mm in a 3.05-m span) as well as even, flat and smooth.
- Concrete and cement-based underlayments/patches must be cured and free of any hydrostatic and/or moisture problems.

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

Refer to the flooring manufacturer's guidelines for acclimation requirements and complete installation instructions. Read all installation instructions thoroughly before installation.

1. Select the appropriately notched trowel (see the "Approximate Coverage" chart below).
2. Key the adhesive into the surface of the substrate using the flat side of the trowel.
3. Spread adhesive evenly over the subfloor, keeping the trowel at a 45-degree angle to the surface.
4. Do not spread more adhesive than can be covered with floor covering within 30 minutes. After spreading the adhesive, immediately install the flooring material into the adhesive while it is still fresh.
5. Periodically lift the material to confirm more than 90% adhesive transfer to the backing.
6. Roll the flooring surface across the width and length with the manufacturer's recommended roller to break down adhesive ridges and to ensure complete removal of trapped air. Pull (rather than push) the roller, so that footprints are not left on the floor.
7. Complete the installation per the flooring manufacturer's instructions.

Note: It is sometimes necessary to apply weights, particularly at the seams, to maintain contact until the adhesive sets.

CLEANUP

- *Ultrabond Sport PU 1K* is extremely difficult to remove when cured.
- *Ultrabond Urethane Cleaner* may also be used while the adhesive is still fresh/wet. Use with caution, as some flooring finishes can be damaged with solvent-based cleaners.

PROTECTION

- Protect the finished installation from light traffic for at least 12 hours and from heavy traffic for at least 24 hours.
- Protect from rain/water exposure and freezing conditions for 48 hours after installation.
- 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) | < 40 g per L |
| Density | 14 lbs. per U.S. gal. (1.68 g per mL) |
| Flash point | > 200°F (93°C) |

Shelf Life and Product Characteristics

| | |
|--------------------|---|
| Shelf life | 1 year when stored in original, unopened packaging at 73°F (23°C) |
| Storage conditions | Store at 65°F to 80°F (18°C to 27°C). |
| Polymer type | Moisture-cured urethane |
| Consistency | Smooth paste |
| Color | Dark gray |

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* | 0 to 10 minutes |
| Working time** | 20 to 30 minutes |
| Adjustability time*** | 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 or wall 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 or wall covering.

*** Adjustability time is the window of time when adjustments can still be made to the position of the floor or wall covering without compromising the bond of the adhesive.

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

Packaging

| |
|-----------------------------------|
| Size |
| Metal pail: 4 U.S. gals. (15.1 L) |

Approximate Coverage†

| Typical Trowel | Coverage |
|--|--|
| 1/16" x 1/16" x 1/16" (1.5 x 1.5 x 1.5 mm), square-notch | 90 to 120 sq. ft. per U.S. gal. (2.20 to 2.94 m ² per L) |
| 1/8" x 1/8" x 1/8" (3 x 3 x 3 mm), U-notch | 50 to 60 sq. ft. per U.S. gal. (1.22 to 1.47 m ² 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. **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, visit www.mapei.com.
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