

Ultrabond Turf PU 1K

Premium, Fast-Setting, Urethane Adhesive for Turf
Seams



DESCRIPTION

Ultrabond® Turf PU 1K is a fast-setting, moisture-curing, one-component, urethane adhesive specifically designed for bonding of synthetic turf in high-performance sports installations. Offering excellent weather resistance, *Ultrabond Turf PU 1K* can be used in interior and exterior applications. It meets FIFA requirements for bond strength in sports-turf applications.

FEATURES AND BENEFITS

- Fast setting time
- Excellent handling characteristics and superior green strength
- Exceeds FIFA standards for bond strength

INDUSTRY STANDARDS AND APPROVALS

- Exceeds FIFA Joint Strength (EN 12228 and EN 13744) requirements

WHERE TO USE

- Interior and exterior installations of synthetic turf
- Professional and educational sports fields
- Commercial and residential landscaping applications of synthetic grass

LIMITATIONS

- Install only in areas recommended by the turf manufacturer.
- Use only when the surface temperature is between 41°F and 95°F (5°C and 35°C), and when the ambient relative humidity is between 20% and 80%. When the ambient relative humidity is lower than 20%, longer cure times can be expected.
- Do not use to install nonporous turf backings over nonporous surfaces.

SUITABLE SURFACES

- *Ultrabond Turf Tape* or manufacturer-recommended seaming tape
- Exterior and marine-grade plywood, and pressure-treated lumber
- Other approved wood underlayments (per manufacturer recommendations)
- Concrete
- Cement-based, exterior-rated patching and repair compounds
- Existing cured asphalt pavement in good condition

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

SURFACE PREPARATION

- All surfaces must be prepared in accordance with the manufacturer of the synthetic playing surface for the type of intended use and must comply with current regulations or standards.
- All surfaces must be structurally sound, dry, solid, stable, even, flat and smooth.
- The surface 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.

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.

Seaming and full-spread installations

1. Unroll and acclimate synthetic turf per the manufacturer’s written instructions to allow for reduction of internal tensions caused by packaging and transport.
2. Select the appropriately notched trowel (see the “Approximate Coverage” section).
3. Spread *Ultrabond Turf PU 1K* evenly over the seaming tape scrim or other suitable surface, keeping the trowel at a 45-degree angle.
4. Only apply as much *Ultrabond Turf PU 1K* as can be installed within 30 minutes.
5. Install turf in strict accordance with the turf manufacturer’s written instructions.
6. Adhesive transfer to the backing should be confirmed periodically by lifting the turf material.
7. If needed, place weight on the turf seams to ensure proper bonding.

CLEANUP

- Clean any adhesive smudges from the turf surface with a white cloth and mineral spirits while the adhesive is still fresh/wet. Clean tools with mineral spirits while the adhesive is still fresh/wet. *Ultrabond Turf PU 1K* is extremely difficult to remove when cured.

PROTECTION

- Protect the installation from light traffic for at least 12 hours. Protect it from heavy traffic for at least 24 hours.
- Protect the installation from rain/water exposure and freezing conditions for 12 hours after installation.

Product Performance Properties

| Laboratory Tests | Results |
|--|-------------------|
| Polymer type | Polyurethane |
| Solids content | 100% |
| VOC content (SCAQMD Rule 1168) | < 50 g per L |
| Typical VOC content per SCAQMD Rule 1168 testing methods | 0 g per L |
| Joint/bond strength | > 75 N per 100 mm |
| Flash point (Tag) | > 200°F (93°C) |

Shelf Life and Product Characteristics

before mixing

| | |
|--------------------|---|
| Shelf life | 1 year when stored in original, unopened packaging at 73°F (23°C) |
| Storage conditions | 50°F to 90°F (10°C to 32°C) |



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

| Flash time* | 0 minutes |
|-----------------|------------------|
| Working time** | 30 to 45 minutes |
| Setting time*** | 45 to 90 minutes |

* Flash time is the recommended amount of time for a freshly applied adhesive to remain exposed to the air following application 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.

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

Flash time, working time and setting time vary based on temperature, humidity, surface porosity and jobsite conditions. For example, high heat and humidity will reduce working time and setting time; low temperatures and humidity will extend working time and setting time.

Packaging

| Size | Color |
|-------------------------------------|-------|
| Plastic pail: 1 U.S. gal. (3.79 L) | Green |
| Plastic pail: 5 U.S. gals. (18.9 L) | Green |

Approximate Coverage†

| Usage | Coverage |
|-------------|--|
| Full spread | With a 3/16" x 5/32" (4.5 x 4 mm) sawtooth trowel: 32 to 40 sq. ft. per U.S. gal. (0.78 to 0.98 m ² per L) |
| Seaming | With a 3/16" x 5/32" (4.5 x 4 mm) sawtooth trowel: 160 to 200 linear ft. per 5 U.S. gals. (1.2 to 1.5 linear m per 18.9 L) |

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



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_USA@mapei.com (USA) or sustainability-durabilite@mapei.com (Canada).

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.**

CONTACT INFORMATION

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For the most current product data and BEST-BACKEDSM warranty information, visit www.mapei.com.
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