

Ultrabond Turf PU 1K-LV

Low-Viscosity, Fast-Setting, Urethane Adhesive for Turf Installation



DESCRIPTION

Ultrabond® Turf PU 1K-LV is a fast-setting, moisture-curing, polyurethane adhesive specifically designed for full glue-down applications with smooth-backed synthetic turf, such as for batting cages and lacrosse fields. The low-viscosity formula can be troweled or sprayed via an airless pump sprayer. *Ultrabond Turf PU 1K-LV* is also suitable for repairs, curbs/edging and detail work.

FEATURES AND BENEFITS

- Low-viscosity for easy installation
- Fast setting time
- Sprayable via airless pump sprayer
- Suitable for bonding rubber underlayment
- Excellent handling characteristics and superior green 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
- Ideal for smooth- and felt-backed synthetic turf
- Commercial and residential landscaping applications of synthetic turf

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.
- Do not use to install synthetic turf on porous asphalt surfaces.

SUITABLE SUBSTRATES

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

SURFACE PREPARATION

- All surfaces must be prepared in accordance with the manufacturer of the synthetic turf 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.

- Shake container of *Ultrabond Turf PU 1K-LV* for 15 to 20 seconds before each use.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

Standard application

1. Unroll and acclimate synthetic turf per the manufacturer's written instructions.
2. Spread *Ultrabond Turf PU 1K-LV* evenly over the seaming tape scrim or other suitable surface, keeping the trowel at a 45-degree angle. There should be at least 5" (12.5 cm) of adhesive-to-turf-backing contact on each side of the seam.
3. Only apply as much *Ultrabond Turf PU 1K-LV* as can be installed within 30 minutes.



4. Install turf in strict accordance with the turf manufacturer's written instructions.
5. Adhesive transfer of $\geq 90\%$ to the backing should be confirmed periodically by lifting the turf material.
6. If needed, place weight on the turf seams to ensure proper bonding.

Spray application

1. Unroll and acclimate synthetic turf or rubber underlayment per manufacturer's written instructions.
2. *Ultrabond Turf PU 1K-LV* may be applied via airless spray equipment comparable to Gusmer, Graco or GlasCraft devices. Please check with the equipment manufacturer for appropriate recommendations and pump/spray instructions.
3. Spray *Ultrabond Turf PU 1K-LV* evenly over suitable surfaces, keeping the wand nozzle low enough to limit overspray.
4. Only apply as much *Ultrabond Turf PU 1K-LV* as can be installed over within 30 minutes.
5. Install turf or underlayment in strict accordance with the manufacturer's written instructions.
6. Adhesive transfer of $\geq 90\%$ to the backing should be confirmed periodically by lifting the turf material.
7. If needed, place weight on the seams to ensure proper bonding.

CLEANUP

- Clean any adhesive smudges from the turf surface with a white cloth and MAPEI's *Ultrabond Urethane Cleaner* while the adhesive is still fresh/wet. Clean tools with *Ultrabond Urethane Cleaner* while the adhesive is still fresh/wet. *Ultrabond Turf PU 1K-LV* 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 24 hours after installation.

Product Performance Properties

Laboratory Tests	Results
Polymer type	Polyurethane
Solids content	100%
Flash point	200°F (93°C)
VOC content (SCAQMD Rule 1168)	< 50 g per L
Typical VOC content per SCAQMD Rule 1168 testing method	4 g per L
Joint/bond strength	> 75 N per 100 mm

Shelf Life and Product Characteristics

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 to 5 minutes
Working time**	30 to 45 minutes
Set 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.

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

Packaging

Size	Color
Plastic squeeze bottle: 1 U.S. qt. (946 mL), 12 per box	Green
Plastic jug: 1 U.S. gal. (3.79 L), 4 per box	Green
Plastic pail: 5 U.S. gals. (18.9 L)	Green
Metal drum: 55 U.S. gals. (208 L)	Green

Approximate Coverage†

Installation Type	Coverage
Full spread with a 3/32" x 4/32" (4.5 x 4 mm) sawtooth trowel	32 to 40 sq. ft. per U.S. gal. (0.78 to 0.98 m2 per L)
Full spread via spray with an adhesive bed of at least 3/32" (2.5 mm)	32 to 40 sq. ft. per U.S. gal. (0.78 to 0.98 m2 per L)
1/4" (6 mm) diameter bead	80 to 90 linear ft. (24.4 to 27.4 m)
3/8" (10 mm) diameter bead	30 to 40 linear ft. (9.14 to 12.2 m)

† 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 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,
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