



Ultrabond Turf PU 1K

One-component polyurethane adhesive for bonding synthetic grass surfaces



WHERE TO USE

Bonding seaming tape jointing strips between synthetic grass rolls (e.g. **Ultrabond Turf Tape 100** or **Ultrabond Turf Tape 300**), both indoors and outdoors.

TECHNICAL CHARACTERISTICS

Ultrabond Turf PU 1K is a polyurethane resin-based, moisture-curing adhesive. It is produced using technology developed in MAPEI's own laboratories, and has the following characteristics:

- one-component, ready-to-use product; no hardener is required, therefore no preliminary mixing; if stored correctly, remaining quantities of the product may be used again at a later date;
- easy to apply, even at low temperatures;
- excellent ridge hold, even in summer at high temperatures;
- very limited expansion of the product, therefore no flatness problems after laying;
- it does not contain solvents or other substances which give off unpleasant smells.

If used with **Ultrabond Turf Tape 100** or **Ultrabond Turf Tape 300** seaming tape, it provides a system which is suitable to satisfy the current FIFA or L.N.D. requirements.

RECOMMENDATIONS

- Do not use **Ultrabond Turf PU 1K** if the temperature is lower than +0°C or higher than +35°C.
- When applied during particularly dry periods, and if the temperature is particularly low (between +0°C and +10°C), a longer hardening time is required.
- Avoid contact with fresh two-component epoxy-polyurethane glue - the product deteriorates.
- Do not use on asphalt surfaces.

APPLICATION PROCEDURE

Preparation of the sub-base

Sub-bases to synthetic playing surfaces must be prepared in accordance with the surface manufacturers instructions and the type of use foreseen, and must comply with current regulations and standards.

Acclimatisation

The single sheets must be unrolled a few hours before starting laying operations, and must be spread out to allow internal tensions caused by the packaging to be reduced.

Spreading the adhesive

Apply **Ultrabond Turf PU 1K** on the seaming tape of **Ultrabond Turf Tape 100** or **Ultrabond Turf Tape 300**, using a No. 3 or No. 4 MAPEI notched trowel. Spread the adhesive evenly along the entire surface of the seaming tape.

TECHNICAL DATA (typical values)	
PRODUCT IDENTITY	
Consistency:	creamy paste
Colour:	green
Density (g/cm ³):	1.40
Dry solids content (%):	100
Brookfield viscosity (mPa·s):	35,000 (rotor 7 - 50 RPM at +23°C)
APPLICATION DATA (at +23°C and 50% R.H.)	
Recommended application temperature range:	from +0°C to +35°C
Open time (formation of surface skin):	30 minutes
Set to light foot traffic:	approximately 12 hours
Waiting time before putting into service:	after ca. 7 days
FINAL PERFORMANCES	
Shore A hardness (DIN 53505) (7 days at +23°C + 14 days at +50°C):	60
Elongation at break (DIN 53504) (%) (7 days at +23°C + 14 days at +50°C):	280
Shear strength (EN 12228- EN 13744):	> 1500 N (std. condition) > 1500 N (after 14 days in water at +70°C)
Resistance to peeling (EN 12228- EN 13744):	> 100 N (std. condition) > 100 N (after 14 days in water at +70°C)
In service temperature range:	from -30°C to +80°C

The open time of the product is approximately 90 minutes under normal temperature conditions (+23°C).

LAYING THE SHEETS

Follow the indications given by the manufacturer of the synthetic grass sheets when laying the product. The grass rolls must be applied along the seaming tape of **Ultrabond Turf Tape 100** or **Ultrabond Turf Tape 300** within 90 minutes of spreading the **Ultrabond Turf PU 1K** at +23°C, in order to guarantee full contact.

If required, place weights on the sheets along the joints to avoid irregularities in flatness.

READY FOR USE

The artificial turf surface is ready for service after approximately 7 days if laid as described above.

CONSUMPTION

Approximately 0.30-0.35 kg per metre of 40 cm wide seaming tape strip using a No. 3 or No. 4 trowel.

COLOUR

Ultrabond Turf PU 1K is available in green.

PACKAGING

15 and 7 kg aluminium bags contained in plastic drums and boxes containing 20 units of 600 ml aluminium soft cartridges.

STORAGE

Ultrabond Turf PU 1K remains stable for at least 12 months if stored in its original, sealed containers.

The adhesive **Ultrabond Turf PU 1K** was tested in accordance with the current tests set out in the specifications given by

F.I.G.C. - L.N.D. and it complies with the requirements related to installing artificial turf for football pitches intended for F.I.G.C., L.N.D. and S.G.C. tournaments.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Ultrabond Turf PU 1K is irritant for the skin, eyes and respiratory tract, it may cause irreversible damage if used for lengthy periods and it may cause sensitisation if it comes in contact with the skin in those subjects sensitive to isocyanates.

When applying the product it is recommended to use protective clothes, gloves and goggles, to wear a safety mask to protect the respiratory system and to work only in well ventilated areas. If the product comes in contact with the eyes or skin wash immediately with plenty of water and seek medical attention.

For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet.

PRODUCT ONLY FOR PROFESSIONAL USE.

WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case,

be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com

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 or replace requirements per the TDS in force at the time of the MAPEI product installation.

The most up-to-date TDS can be downloaded from our website www.mapei.com.

ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.

All relevant references for the product are available upon request and from www.mapei.com



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