



Ultrabond Turf 2 Stars



Two-component, solvent and water-free polyurethane adhesive for bonding seaming tapes between rolls of synthetic grass



WHERE TO USE

Bonding seaming tapes between synthetic grass sheets, both indoors and outdoors (e.g. **Ultrabond Turf Tape 100** or **Ultrabond Turf Tape 300**).

TECHNICAL CHARACTERISTICS

Ultrabond Turf 2 Stars is a two-component, solvent and water-free polyurethane adhesive. The two part component consists of component A, a thick paste, and component B, a fluid hardener. The mixing ratio between the two components is 90:10 (9:1). When the two components are mixed together, a uniform coloured paste, easy to apply using a notched trowel and with an excellent ridge holding is obtained.

After hardening (24 hours at room temperature), which takes place due to a chemical reaction without shrinkage, **Ultrabond Turf 2 Stars** becomes a tough film with high adhesion properties to any suitable support material.

When used to bond seaming tape, **Ultrabond Turf Tape 100** or **Ultrabond Turf Tape 300** helps to form a system that complies with FIFA standards.

RECOMMENDATIONS

- Do not use **Ultrabond Turf 2 Stars** at temperatures lower than 0°C. Where there are applications at high temperatures (higher than +35°C), the pot life of **Ultrabond Turf 2 Stars** may be greatly reduced. Before mixing store component B at temperatures higher than +5°C.
- Only mix complete kits, mixing only partial quantities

requires considerable accuracy when weighing the two components.

APPLICATION PROCEDURE

Preparation of the substrate

Sub-bases must be prepared according to the instructions for the preparation of synthetic playing surfaces according to the type of use foreseen, and according to current regulations and standards.

Conditioning

The single rolls must be unrolled a few hours before starting installation, and must be spread out to allow internal tension caused by the packaging to be reduced.

Mixing

The two components which make up **Ultrabond Turf 2 Stars** are contained in pre-dosed containers:
– component A: 90 parts by weight;
– component B: 10 parts by weight.

If the ratio is modified, correct curing of the product will be prevented and final strength affected.

Mixing must be carried out using a low-speed mechanical mixer, until a smooth paste with a uniform colour is obtained. The setting time and the pot life of the product depends on the room temperature at the moment of the application. The chemical reaction is too slow if the temperature is lower than 0°C and application is not recommended.

Spreading the adhesive

Apply **Ultrabond Turf 2 Stars** on the seaming tape

TECHNICAL DATA (typical values)		
PRODUCT IDENTITY		
	component A	component B
Consistency:	thick paste	fluid liquid
Colour:	green, red, white	brown
Density (g/cm³):	1.70 ± 0.05	1.2 ± 0.01
Dry solids content (%):	100	100
Brookfield viscosity (mPa-s):	240,000 ± 40,000 (rotor 7 - 10 rpm)	200 ± 20 (rotor 1 - 50 rpm)
EMICODE:	EC1 R Plus - very low emission	
APPLICATION DATA (at +23°C and 50% R.H.)		
Mixing ratio:	component A : component B: = 90 : 10	
Brookfield viscosity of mix (mPa-s):	35,000 ± 5,000 (rotor 7 - 50 rpm)	
Density of mix (g/cm³):	1.60 ± 0.05	
Pot life:	approx. 30 minutes	
Recommended application temperature range:	from +15°C to +35°C	
Open time:	40-45 minutes	
Start setting time:	approximately 2 hours	
End of setting time:	approximately 4 hours	
Set to light foot traffic:	after 12-24 hours	
Ready for use:	7 days	
FINAL PERFORMANCES		
Shear strength (EN 12228 – EN 13744):	> 1500 N (standard conditions)	> 1500 N (after 14 days in water at +70°C)
Peel strength (EN 12228 – EN 13744):	> 100 N (standard conditions)	> 100 N (after 14 days in water at +70°C)

(Ultrabond Turf Tape 100) using a No. 3 or No. 4 MAPEI notched trowel. Spread the adhesive evenly over the entire surface of the seaming tape. The open time of the product is approximately 40-45 minutes under standard temperature conditions (+23°C).

LAYING THE SHEETS

Follow the indications given by the manufacturer of the synthetic grass sheets when laying the product. The sheets must be fixed along the seaming tapes within 40-45 minutes from application of **Ultrabond Turf 2 Stars** (at +23°C) while it is still fresh, in order to guarantee full contact. If required, place weights along the joints to avoid irregularities in flatness.

READY FOR USE

The sheets are ready for service after approximately 7 days if laid as described above.

CONSUMPTION

Approximately 0.4-0.5 kg per metre of 40 cm-wide seaming tape (5 kg of product for 10 linear metres).

COLOUR

Ultrabond Turf 2 Stars is available in green, red and white.

PACKAGING

5 and 15 kg kits in plastic pails.

STORAGE

Ultrabond Turf 2 Stars remains stable for at least 12 months if stored in its original, sealed containers under standard conditions.

Keep **Ultrabond Turf 2 Stars** away from frost during transport and storage. Do not expose it to temperatures lower than +5°C for long periods.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Ultrabond Turf 2 Stars component A is not considered as dangerous according to the current regulation regarding the classification of mixtures.

Ultrabond Turf 2 Stars component B 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. The product does not give off hazardous vapours at room temperature and under normal conditions of use. If used at temperatures higher than +60°C the product may cause sensitisation if inhaled. In the event of sickness seek medical attention. 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

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This symbol is used to identify Mapei products which give off a low level of volatile organic compounds (VOC) as certified by GEV (Gesellschaft Emissionskontrollierte Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.), an international organisation for controlling the level of emissions from products used for floors.



Our Commitment To The Environment
MAPEI products assist Project Designers and Contractors create innovative LEED (The Leadership in Energy and Environmental Design) certified projects, in compliance with the U.S. Green Building Council.

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



**Ultrabond Turf
2 Stars**

