Two-component, solvent and water-free polyurethane adhesive for bonding jointing strips between panels of synthetic grass sheets

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B MAPEI



WHERE TO USE

Bonding jointing strips between synthetic grass sheets, both indoors and outdoors (e.g. Ultrabond Turf Tape 100).

TECHNICAL CHARACTERISTICS

Ultrabond Turf PU 2K is a two-component, solvent and water-free polyurethane adhesive. The two part component consist 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 which is easy to apply using a notched trowel is obtained, characterised by excellent rib formation.

It is particularly recommended for those users who are allergic to epoxy or epoxy-polyurethane products. In the winter, it works better than epoxy-polyurethane products, which set slower at low temperatures.

After hardening (24 hours at ambient temperature), which takes place due to chemical reaction and is without shrinkage, Ultrabond Turf PU 2K becomes a tough film with high adhesion properties to any kind of support material.

When used for bonding Ultrabond Turf Tape 100, pitches which meet FIFA Standards may be obtained.

RECOMMENDATIONS

- Do not use Ultrabond Turf PU 2K at temperatures less than 0°C. Where there are applications at high temperatures (higher than +35°C), the pot life of Ultrabond Turf PU 2K 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

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

Acclimatisation

The single sheets 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 PU 2K are contained in pre-dosed plastic containers.

- component A: 90 parts by weight;
- component B: 10 parts by weight.



TECHNICAL DATA (typical values)

PRODUCT IDENTITY	
	component A component B
Consistency:	thick paste fluid liquid
Colour:	green / red / white brown
Density (g/cm³):	1.65 1.2
Dry solids content (%):	100 100
Brookfield viscosity (mPa·s):	60,000 20 (rotor F - 50 RPM) (rotor 1 - 50 RPM)
EMICODE:	EC1 R - 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):	25,000 (rotor 7 - 50 RPM)
Density of mix (g/cm³):	1.60
Pot life of mix:	approx. 60 minutes
Recommended application temperature range:	from +0°C to +30°C
Open time:	70-80 minutes
Start setting time:	approximately 3 hours
End of setting time:	approximately 4 hours
Set to light foot traffic:	after 12-24 hours
Ready for use:	7 days
FINAL PERFORMANCE	
Shear strength (EN 12228 - EN 13744):	 > 1500 N > 1500 N (after 14 days water immersion at +70°C)
Peel strength (EN 12228 - EN 13744):	> 120 N > 100 N (standard conditions) (after 14 days water immersion at +70°C)

If the ratio is modified, correct curing of the product will be impeded.

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

Spreading the adhesive

Apply **Ultrabond Turf PU 2K** on the jointing strips of **Ultrabond Turf Tape 100** using a No. 3 or No. 4 MAPEI notched trowel. Spread the adhesive evenly over the entire surface of the jointing strips. The open time of the product is approximately 70-80 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 sheets must be fixed along the jointing strips within 70-80 minutes from application of **Ultrabond Turf PU 1K** 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 jointing strip (5 kg of product for 10 linear metres).

COLOUR

Ultrabond Turf PU 2K is available in green and red.

PACKAGING

15 kg units.

STORAGE

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

Keep **Ultrabond Turf PU 2K** away from freezing conditions during transport and storage. Do not expose it to temperatures lower than $+5^{\circ}$ C for long periods.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION Ultrabond Turf PU 2K component A is

not considered as dangerous according to the current regulation regarding the classification of mixtures.

Ultrabond Turf PU 2K component B is harmful and may cause irreversible damage. It may cause sensitisation if inhaled or if it comes into contact with the skin. When applying the product, we recommend using protective cloths, gloves and goggles, protecting the respiratory tracks wearing a mask and working in well ventilated areas. If the product comes into contact with the eyes or skin, wash immediately with plenty of clean 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



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



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





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