



# Ultrabond Turf PU 1K LC

**One component,  
polyurethane adhesive  
for bonding synthetic  
grass surfaces**



## WHERE TO USE

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

## TECHNICAL CHARACTERISTICS

**Ultrabond Turf PU 1K LC** 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 mixing; if stored correctly, remaining quantities of the product may be used again at a later date;
- it may be used by those users who are allergic to epoxy or epoxy-polyurethane products;
- easy to apply, even at low temperatures;
- excellent hold along a straight line, 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** jointing strips it provides a system which is suitable to satisfy FIFA prerequisites.

## RECOMMENDATIONS

- Do not use **Ultrabond Turf PU 1K LC** 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.

## APPLICATION PROCEDURE

### Preparation of the substrate

Substrates to synthetic playing surfaces must be prepared in accordance with the surface manufactures 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 LC** on the jointing strips of **Ultrabond Turf Tape 100** using a No. 3 or No. 4 MAPEI notched trowel. Spread the adhesive evenly along the entire surface of the jointing strips. The open time of the product is approximately

TECHNICAL DATA (typical values)	
<b>PRODUCT DETAILS</b>	
Consistency:	creamy paste
Colour:	green
Density (g/cm <sup>3</sup> ):	1.40
Dry solids content (%):	100
Brookfield viscosity (mPa·s):	31,000 ± 5,000 (rotor 7 - 50 RPM at +23°C)
Hazard classification according to EC 1999/45:	harmful. Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet
<b>APPLICATION DATA (at +23°C and 50% R.H.)</b>	
Recommended application temperature range:	from +0°C to +35°C
Open time (formation of surface skin):	60 minutes
Set to light foot traffic:	approximately 12 hours
Waiting time before putting into service:	after ca. 7 days
<b>FINAL PERFORMANCES</b>	
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):	100
Adhesion of Ultrabond Turf Tape 100 to synthetic grass [shear test according to EN 12228 (FIFA standards)]:	- 1250 N (after 4 days at +23°C) - 1400 N (after 4 days at +23°C + 14 days at +70°C in water)
In service temperature range:	from -30°C to +80°C

60 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 panels must be applied along the jointing strips of **Ultrabond Turf Tape 100** within 60 minutes of spreading the **Ultrabond Turf PU 1K LC** 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 sheets are 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 jointing strip using a No. 3 or No. 4 trowel.

### **COLOUR**

**Ultrabond Turf PU 1K LC** is available in green.

### **PACKAGING**

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

### **STORAGE**

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

### **SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION**

**Ultrabond Turf PU 1K LC** is an irritant if it comes into direct contact with the

eyes or skin. Fumes which may be given off if applied at high temperatures, and continuous contact to the skin could provoke a reaction when in direct contact to the skin of users who are allergic to isocyanate.

Protect the eyes, avoid inhaling the fumes given off and wear suitable gloves. Seek medical attention in the case of giddiness or fainting.

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

PRODUCT 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](http://www.mapei.com)**

**All relevant references  
for the product are available  
upon request and from  
[www.mapei.com](http://www.mapei.com)**

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