



DCI SYNTHETHIC PU 100 IS A ONE-COMPONENT, SOLVENT-FREE POLYURETHANE ADHESIVE SPECIFICALLY DEVELOPED FOR THE INSTALLATION OF SYNTHETIC TURF SPORTS SURFACES, IN PARTICULAR FOR THOSE ACTIVITIES REQUIRING SUBSTRATES WITH HIGH ELASTIC-MECHANICAL PERFORMANCES.



PRODUCT DESCRIPTION

DCI SYNTHETHIC PU 100 is a one-component, solvent-free polyurethane adhesive specifically developed for the installation of synthetic turf sports surfaces, in particular for those activities requiring substrates with high elastic-mechanical performances. DCI SYNTHETHIC PU 100 can be applied on damp surfaces, but any residue of standing water which could compromise the complete bonding of the system has to be removed. DCI SYNTHETHIC PU 100 is suitable for the installation of systems with homologations such as FIFA.

FIELD OF APPLICATION

- Indoor and outdoor installation of synthetic turf through bonding of seaming tapes.
- Installation of artificial turf for sports purposes.
- Installation of SF Rubbergum through bonding to the substrate.

SUITABLE SUBSTRATES

- Concrete
- Cement Block
- Liquid waterproofing membranes
- Existing tiles

LIMITATIONS

- Do not mix with other elements.
- Do not apply on metallic or rubber substrate.
- Do not apply on substrate subject to significant movement or vibration.
- Do not apply on not sufficient cured substrate.
- Do not add water or solvent to improve workability
- Do not use in wet substrates

APPLICATION PROCEDURE

A) Preparation of the support

The substrate on which the artificial turf is to be applied must be prepared according to current regulations and standards and according to the type of sports activity foreseen. The substrate of the playing surface, as well as the artificial turf system must comply with technical specifications required by the respective Federations, if present, such as FIFA, etc.

B) Preparing the product

Ready to be used.

C) Applying the product

Make sure surfaces to be bonded are clean, sound and free from standing water, oil, grease or any inconsistency that could affect adhesion. The adhesive can be applied in presence of humidity, nonetheless any trace of standing water must be removed beforehand. Apply DCI SYNTHETHIC PU 100 on the seaming tapes using a notched trowel or with a suitable continuous and controlled spreading system. Make sure to distribute the adhesive evenly on the whole width of the tapes.

If DCI SYNTHETIC PU 100 is used for installation of bonded sports surfaces such as high-performance prefabricated rubber mats, it is recommended to follow the directions from the material's supplier about the type of system to be applied and the planned surface to be bonded. Open time of DCI SYNTHETIC PU 100 in normal conditions (+23°C and 50% R.H.) is of approx. 40-45 minutes. Setting and open time are heavily influenced by the surrounding temperature at the moment of application.

D Installing the turf

For a correct installation of the artificial turf always follow the exact supplier's directions for the laying procedure. The artificial turf rolls must be laid on the seaming tape covered with fresh DCI SYNTHETIC PU 100 within 40-45 minutes from application (at +23°C and 50% R.H.). It is advisable to apply a mechanic pressure after laying, for example by passing a roller on the bonded surface to ensure complete contact between the turf backing and the adhesive and at the same time level off any irregularities that could compromise the flatness of the surface.

E) Ready for use

Sports surfaces installed using DCI SYNTHETIC PU 100 can be set to light foot traffic after approx. 12-24 hours. Final performances are reached after approx. 7 days at +23% and 50% R.H..

COVERAGE / CONSUMPTION

When bonding synthetic grass, the consumption rate of DCI SYNTHETIC PU 100 depends on the type of seaming tape and the application method used:

- approx. 0.4 - 0.5 kg per linear metre of 40 cm wide seaming tape.
- approx. 0.3 - 0.4 kg per linear metre of 30 cm wide seaming tape.

If is used for bonding sports surfaces created with high-performance prefabricated rubber mats consumption per m² can vary consistently according to the type of substrate, ranging from a minimum of 1 kg to 2 kg per m².

PACKAGING

DCI SYNTHETIC PU 100 is supplied in 5 and 15Kg plastic bucket.

SHELF LIFE

Original sealed bags of this product are guaranteed to be of first quality for 24 months if stored off of the ground in a dry area. High humidity will reduce the shelf life of the bagged product.

SAFETY INSTRUCTION

DCI SYNTHETIC PU 100 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.

TECHNICAL DATA

Product identity

Consistency:	thick paste
Colour:	green
Density (Kg/Lt):	1.5
Dry solids content (%):	100
Brookfield viscosity (mPa-s):	800.000 (# F - 5 rpm)
Classification:	EN 12004 and EN 12002

Application data (at +23°C and 50% R.H.)

Mixing ratio:	ready for use
Application temperature range:	from +10°C to +30°C
Open time (according to EN 1346):	45 minutes
Adjustment time:	120 minutes
Set to light foot traffic:	after 10-12 hours
Ready for use:	after 7 days

Final performances

Adhesion strength according to EN 1348 (N/mm ²)	
- Initial adhesion strength (after 28 days):	5.4
- Adhesion strength after heat:	5.8
- Adhesion strength after water immersion:	5.7
- Adhesion strength after freeze-thaw cycles:	5.7
- Shear strength (EN 12228 - EN 13744):	1750
- Peel strength (EN 12228 - EN 13744) (N):	150
Temperature resistance after final cure:	from -30°C to +90°C
Elongation at break (DIN 53504) (%) (7 days at +23°C + 14 days at +50°C):	300
Shore A hardness (DIN 53505) (7 days at +23°C + 14 days at +50°C):	100



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