



DCI SYNTHETHIC S IS A TWO-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 S is a two-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 S is a solvent-free polyurethane adhesive, two components: part A, a thick paste and part B, hardener with fluid liquid consistency. DCI SYNTHETHIC S 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 S 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

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

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

DCI synthetic S is supplied in two components which are supplied in pre-dosed buckets:

- Component A: 8 parts by weight;
- Component B: 2 parts by weight.

The ratio between the two components is compulsory, and any modification may cause the product to harden incorrectly. Pour the catalyst (part B) into the container with part A and mix well until a smooth paste is obtained. We recommend using a low-speed electric mixer to guarantee perfect bonding, and to avoid overheating of the mix which would reduce working times. Use the mix within 45 minutes of its preparation.

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 Synthetic S 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 S 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 S in normal conditions (+23°C and 50% R.H.) is of approx. 40-45 minutes from the complete mixing of the two components. 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 S within 40-45 minutes from mixing (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 S 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 S 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 SYNTHETHIC S is supplied in 5 and 15Kg plastic bucket.

- 3 kg 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 SYNTHETHIC S DCI SYNTHETHIC S component A is irritant for the skin and the eyes, both components A and B may cause sensitization in those subjects sensitive to such substances. DCI SYNTHETHIC S component B is corrosive and may cause burns. The product contains low molecular weight PU resins that may cause sensitization if cross-contamination occurs with other PU compounds. When applying the product, we recommend the use of protective gloves and goggles and to take the usual precautions for handling chemical products. If the product comes into contact with the eyes or skin, wash immediately with plenty of clean water and seek medical attention. DCI SYNTHETHIC S component A is also hazardous for aquatic life. Do not dispose of this product in the environment. 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

	Component A	Component B
Consistency:	thick paste	pasta densa
Colour:	green	beige
Density (Kg/Lt):	1.8	1.1
Dry solids content (%):	100	100
Brookfield viscosity (mPa·s):	800.000 (# F - 5 rpm)	50.000 (# F - 5 rpm)
Classification:	EN 12004 and EN 12002	

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

Mixing ratio:	80	20
Brookfield viscosity of mix (mPa·s):	1.000.000 (# F - 2,5 rpm)	
Density of the mix (kg/Lt):	1.45	
Pot life of mix:	45 minutes	
Application temperature range:	from +10°C to +30°C	
Open time (according to EN 1346):	60 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/mm²)

- Initial adhesion strength (after 28 days):	6.4
- Adhesion strength after heat:	5.8
- Adhesion strength after water immersion:	6.7
- Adhesion strength after freeze-thaw cycles:	6.7
- 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



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