

**POLYCOAT**  
100 % PU BACK COATING WITH TUFTGUARD FUNCTION

POLYCOAT



**polytan**

**WE MAKE SPORT.**

# BETTER AND MORE SUSTAINABLE

At Polytan, we are always on the lookout for ways to provide even better sports surfaces through continuous product development. We also work on various approaches to improving properties for athletes and to further enhance the environmental compatibility and sustainability of our sports surface systems.

## 100 % PU BACK COATING WITH TUFTGUARD FUNCTION

Since its introduction in 2019, the PU coating for our synthetic turf systems, known as Polytan PolyCoat, has offered numerous benefits for people and nature. PolyCoat is the product of intensive research-and-development work undertaken by Polytan, conducted under the motto "The Best for People and the Environment".

## SUPERIOR TO LATEX COATING IN ALL PROPERTIES

The material provides numerous advantages for our high-quality Polytan synthetic turf systems:

### Improved Binding of the Tufts to the Carrier Fabric (TuftGuard Function)

While the previously existing technology already delivered excellent values in terms of tuft bind, we were able to improve this important performance characteristic further. This improvement has resulted in additional reduction of tuft loss, even in cases of heavy usage and the extended lifespan of our synthetic turf systems.

### Lower Wear Coat Weight

Thanks to the new PU coating, the wear-coat weight could be reduced by approx. 350 g/m<sup>2</sup>. This corresponds to a reduction of approx. 30 % without affecting the turf stability or the anchoring of the tufts on the carrier system. This has been achieved as a consequence of the superior PU formulation and resulting improved coating of the PE filaments (with coating compound in the stud base) more than compensating for the reduction in coating weight.

## Positive Environmental Balance

PolyCoat's lighter coating weight also has a positive impact on environmental compatibility and sustainability:

- Because a smaller amount of material is consumed during production, the required energy to dry and stabilise the material in the drying process is reduced
- Its lighter weight also has benefits for transportation, reducing CO<sub>2</sub> emissions by a proportionate amount
- During removal of the turf system and the subsequent recycling process, this material reduction is once again of benefit as the use of PU reduces the proportion of heavy thermoset material in the turf

30% less CO<sub>2</sub> emitted



by the transport of PolyCoat PU wear coat, compared to a Latex wear coat

60% less CO<sub>2</sub> emitted



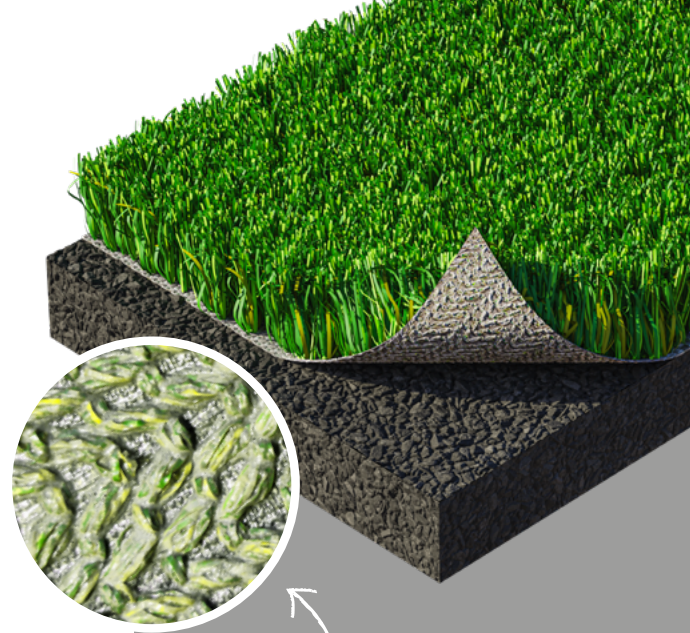
by the production of PolyCoat PU wear coat, compared to a Latex wear coat



## HIGHEST PRODUCT QUALITY PRIORITISED

It goes without saying that we have retained all quality-related parameters of our turf products, while taking the opportunity to improve in certain areas as well:

- The filament formulation is still based on the same high-quality composition our durable, long-lasting Polytan synthetic turf systems have become known for
- The design and construction of the carrier fabric have not changed
- The overall weight of the turf system (i.e. the total of the filament weight, carrier fabric weight and wear-coat weight) has of course been lowered as a result of the reduced wear-coat weight
- But as the performance parameters of filament weight and carrier system weight remain the same, and the TuftGuard function also ensures the pull-out resistance of the tufts at a lower wear-coat weight, the overall quality of the turf system is not diminished
- In other words, surfaces featuring PolyCoat measure up to any turf system utilizing alternative wear-coat formulations
- In fact, performance is actually improved in the TuftGuard system thanks to higher and more stable tuft-extraction parameters
- All synthetic turf systems with PolyCoat PU coating using the TuftGuard function have been tested and certified to the applicable national and international standards
- The reduction of the wear-coat weight makes an important contribution to the sustainability of the product and further improves the carbon footprint of our synthetic turf systems



WITH TUFTGUARD  
FUNCTION

## BETTER MOISTURE STABILITY

Another positive characteristic of PU technology is better resistance to hydrolysis processes. The greater stability in a wet or moist medium ensures that the wear-coat material can perform its function with total efficiency even in humid conditions. This moisture stability contributes to the solidity of the bonding between tufts and back coating as part of the TuftGuard function.

# WIN-WIN FOR PEOPLE AND THE ENVIRONMENT

# WE MAKE SPORT.

**Get personalised support for your questions**

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