

PearlTech®



Perlon® – The Filament Company

Perlon® – The Filament Company – is an innovative, global group of companies specialized in the manufacture of synthetic filaments. Perlon® generates annual sales of more than 150 million euros, employs about 850 people and has a production capacity of 23,000 tons. We operate from locations in Germany, Poland, in the USA and in China.

Through our technical expertise and strength in innovation we develop premium quality products for our customers. The comprehensive product portfolio is based on a variety of raw materials. In line with the intended application, these are modified and processed into high quality, application-specific filaments. The consistent high quality of our products sets worldwide benchmarks.

PearlTech® – soft functionality

PearlTech® are monofilaments made of composites, in which functional particles are mixed into a polymer matrix. This creates unique surface and tribological properties. Unlike coatings, these particles are permanent (see Fig. a).

PearlTech® monofilaments are mainly used in conveyor belts in processes such as paper machine clothing and filters but also in a multitude of other applications. They stand out through their good cleaning properties and consistently long lasting performance, as well as excellent abrasion resistance. As a result, throughput can also be increased and the energy consumption of production lines reduced.

The non-stick properties of PearlTech® were analysed in a peel-off test, this determines the bonding strength of adhesives. This proved that PearlTech® significantly reduces the adhesion force compared to normal PET and has better non-stick properties than PET/PVDF blends. (see fig. b). These results confirm the statements of end users who use PearlTech® as an alternative to monofilaments which contain flourine.

There are multiple advantages to using PearlTech® monofilaments compared to their fluorine containing counterparts: they are non-toxic, non-corrosive and environmentally friendly. PearlTech® is the safe choice to protect your employees and equipment.

PearlTech® can be combined with various polymer types including PET, PA and PP.

PearlTech® Technology

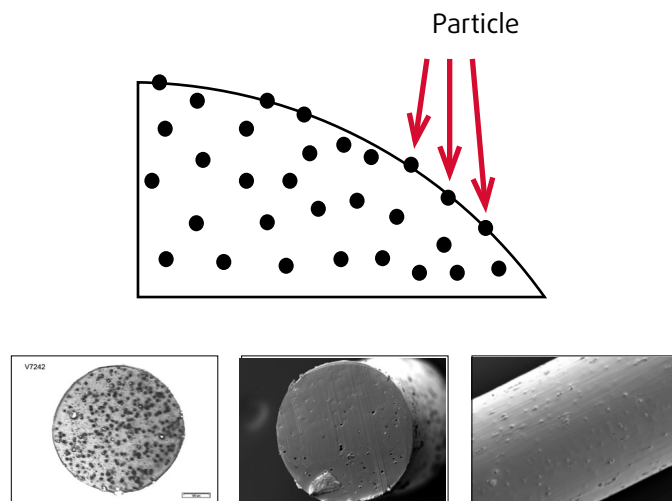


Abb. a - Structure of PearlTech® monofilaments

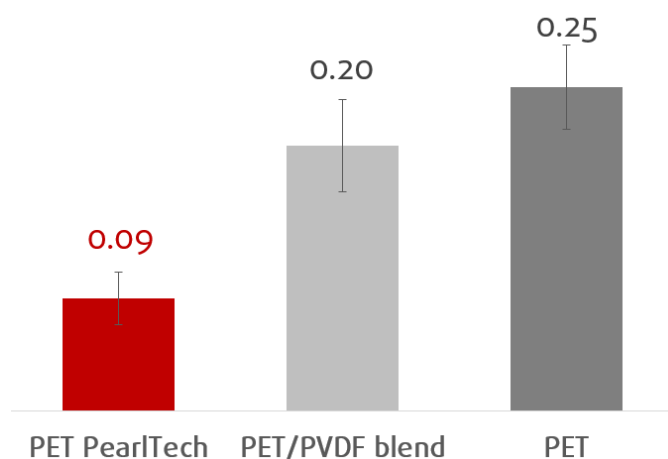


Abb. b - Adhesive force (in N) of polyester-based Adhesives

PearlTech® offers added value

- Individual adaptation for all round and profiled monofilaments and polymer types
- Permanent
- Very good anti-soiling properties
- Reduction in energy consumption of equipment (filter belt, conveyor belts)
- Improved abrasion resistance
- Non-toxic, non-corrosive in contrast to fluoropolymers
- Non development of hydrofluoric acid in case of fire, unlike fluoropolymers
- PET, PA, PP based polymer types available
- Approved according to FDA and EU10/2011

Brand related products: 9**CG, RG, WG, YG

This product information has been compiled to the best of our knowledge and with the greatest of care. We cannot, however, assume any liability for the accuracy, integrity or timeliness of its content. The technical parameters and the behaviour of the monofilament can vary depending on diameter and production technique.