Technical Data Sheet

FlexiFil TPC 30D

Print date: 09-10-2023 **Version:** 1.0

Product specifications

FlexiFil TPC 30D is a rubber-like filament for 3D printing. This engineering filament combines flexibility with elasticity and resilience. You can fold, squish and stretch parts without tearing or breaking it.

Its impact resistance and absorption properties are phenomenal. Your 3D printed objects are almost unbreakable. You can even stretch this material up to more than 400% of its initial size. FlexiFil TPC 30D shows good resistance to chemicals and UV radiation. This material is slightly more flexible than its sibling Flexifil TPC 40D.

Important key features

- Flexible with a shore hardness of 30D.
- Extremely impact resistant.
- High chemical resistance
- Good UV resistant properties.
- Low moisture absorption

Suitable applications

- Insoles and orthopedic applications
- Footwear
- CVJ boots
- Seals and gaskets
- Industrial applications

Material properties	Typical value	Test Method
Density	1.15 g/cm3	ISO 1183
Mechanical properties		
Tensile strength at 100%	45 kgf/cm^2	ASTM D638
Tensile strength at 200%	55 kgf/cm^2	ASTM D638
Tensile strength at 300%	65 kgf/cm^2	ASTM D638
Elongation at break	>400%	ASTM D638
Flexural strength	20 kgf/cm^2	ASTM D790
Izod notched impact strength, 23°C	NB	ASTM D256
Shore hardness D	30	ISO 7619-1
Thermal properties		
Heat Deflection Temperature (0.45mn/m2)	50°C	ASTM D648

Storage and handling

Filament should be stored at room temperature in a dry and dark place with humidity below 15%. Recommended storage temperature is ca. 18-25°C (64.4 -77.0°F). Keep out of moisture, sunlight and direct heat. When stored properly, product has a shelf life of 24 months. To obtain the best parameters of the printed object, it is recommended to dry the material prior to usage and to 3D print it directly from a dry box.

Product export information

HS Code	Description	Origin
39169090	Monofilament for 3D printing	European Union

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