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Version: 1.0

Product specifications

FlexiFil TPC 40D 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 40D shows good resistance to chemicals and UV radiation. This material is slightly less flexible than its sibling FlexiFil TPC 30D.

Important key features

- Flexible with a shore hardness of 40D.
- 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

Density

Typical value

1.22 g/cm³

Test Method

ISO 1183

Mechanical properties

Tensile strength at 100%

80 kgf/cm²

ASTM D638

Tensile strength at 200%

90 kgf/cm²

ASTM D638

Tensile strength at 300%

100 kgf/cm²

ASTM D638

Elongation at break

>400%

ASTM D638

Flexural strength

45 kgf/cm²

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

39169090

Description

Monofilament for 3D printing

Origin

European Union

Disclaimer

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