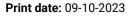


# **Technical Data Sheet**

FlexiFil TPC 40D





### **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
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• Extremely impact resistant.

• Good UV resistant properties.

• High chemical resistance

Low moisture absorption

• Flexible with a shore hardness of 40D.

## Suitable applications

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

<b>Material properties</b> Density	<b>Typical value</b> 1.22 g/cm3	Test Method ISO 1183
Mechanical properties		
Tensile strength at 100%	80 kgf/cm <sup>2</sup>	ASTM D638
Tensile strength at 200%	90 kgf/cm <sup>2</sup>	ASTM D638
Tensile strength at 300%	100 kgf/cm <sup>2</sup>	ASTM D638
Elongation at break	>400%	ASTM D638
Flexural strength	45 kgf/cm <sup>2</sup>	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	

#### Disclaimer

The product- and technical data provided in this datasheet is correct to the best of FormFutura BV's knowledge and are intended for reference and comparison purposes only. Actual values may vary according to printing conditions, model complexity, environmental conditions, etcetera. Typical values are indicative only and are not to be construed as being binding specifications. All other information supplied, including that herein, is considered accurate but is furnished upon the express condition that the customer shall make its own assessment to determine a product's suitability for a particular purpose. We make no warranty, express or implied, including regarding any information supplied or the data upon which it is based or the results to be obtained from the use of such products or information, or concerning product, whether of satisfactory quality, merchantability, fitness for any particular purpose or otherwise, or with respect to intellectual property infringement as a result of use of information or products, and none shall be implied.

