

Datasheet

PEEK Filament

Polyether Ether Ketone (PEEK) PEEK polymers are obtained by step-growth polymerization. PEEK is a semicrystalline thermoplastic with excellent mechanical and chemical resistance properties that are retained to high temperatures.

Key properties

- Regarded as one of the highest performing engineering thermoplastics in the world
- Particularly suitable for usage in FDM and FFF 3D printers
- According EC no. 1935/2004, EC no. 2023/2006 and EC no. 10/2011

Measurements & Tolerances

Diameter	Tolerance	Roundness
1,75 mm Filament	+/- 0,05 mm	99%
2,85 mm Filament	+/- 0,05 mm	99%

Moisture content	< 0,005%
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Technical information

PEEK is regarded as one of the highest performing engineering thermoplastics in the world. PEEK is used to fabricate items used in demanding applications in aerospace, automotive, oil and gas and medical industries.

Our PEEK Filament has unique properties because it does not come into contact with water during the production process and is directly packaged in a vacuum packaging. These properties make the PEEK Filament particularly suitable for use in FDM and FFF 3D printers. The material has an excellent adhesion between layers which results in great improvement of the impact resistance, strength, durability and the printing process.

Datasheet

Physical properties

Description	Value	Test method
Density	1,26 g/cm ³	ISO 1183

Mechanische eigenschappen

Description	Value	Testmethode
Tensile Modulus	3700 Mpa	ISO 527-2
Flexural Modulus	4300 Mpa	ISO 178
Impact strength Notched Izod	5,0 KJ/m ²	ISO 180
Hardness Shore D	85	ISO 868

Printer settings

Description	Value
Printer nose temperature	335 - 390°C
Heated platform temperature	120°C

Our PEEK Filament meets the European regulations EC No. 1935/2004, EC No. 2023/2006 and EC No. 10/2011 concerning plastic materials and articles coming into contact with food and is also compliant with the FDA (Food and Drug Administration) for food contact. The colorants used to colour the Filament also meet these European regulations.

To get the best results while printing we advise you to keep the 3D printer in a room where there is hardly any draft and/or temperature fluctuations. Keep the 3D printer out of the sun. This cannot be a room where people sleep.

When the 3D printer is not being used it is important to keep the PEEK Filament in a bag and stored in a cool, dry and dark place until it is used again

Datasheet

Safety information

REGULATION (EC) No. 1272/2008. According to EC regulations this product is not classified as dangerous for supply/use.

Classification according to EU-directive 67/548/EEC or 1999/45/EC. According to EC criteria this product is not classified as dangerous for supply/use.

Composition and information on the components

EC Classification No. 1272/2008

Hazardous ingredient(s)	%W/W	EC No.	REACH Registration No.	Hazard Statement(s)
None	-	-	-	-

EC Classification No. 67/548/EEC

Hazardous ingredient(s)	%W/W	EC No.	REACH Registration No.	EC Classification and Risk Phrases
None	-	-	-	-

Exposure controls/Personal protection

Local Exhaust Ventilation at the workplace or on the 3D printer is required.

Legally Obligated Information

1 Specific safety, health and environmental regulations and legislation for the substance or mixture.

Classification of the substance or mixture

The substance is not classified as dangerous according to Regulation (EC) no 1272/2008 (CLP/GHS) and Directive 67/548/EEC.

2 Chemical safety assessment: Does not apply

RoHS (Restriction of Hazardous Substances) and REACH (Registration, Evaluation, Authorization and Restriction of Chemicals).

Recommended restrictions

Do not use in medical applications involving permanent implantation in the human body.

Environmental information

Plastic waste can damage the environment. 3D misprints must be separated with plastic waste together with the Filament reel. We are developing a return system for 3D misprints and the Filament reel.

Together we can protect the environment!