

PP 2320

Description:

Fillamentum provides 3D printing filament made of polypropylene. Material is ideal for prototyping thanks to wide application range. This commodity polymer is used in all the industries.

PP 2320 has high mechanical and impact resistance. The flexural strength is good also at temperatures up to -40 °C. Other great properties are chemical resistance against acids, alkalis and salts, low density or electrical insulation. The material can be recycled easily.

The printed object has great inter-layer adhesion, smooth and matte surface. The material offers high dimensional stability and low moisture adsorption.

This material can be used for production of electrical and electronic equipment. It doesn't contain the restricted substances. The material complies with requirements for food contact applications.

Fillamentum can guarantee maximum deviation of diameter +/- 0,07 mm. During the production, filament is made with the best stability of diameter, roundness and colour.

Physical properties	Typical Value	Test Method	Test Condition
Material density	0,96 g/cm ³	ISO 1183 A	(23 ± 2) °C
Melt flow index	7,4 g/10 min	ISO 1133	230 °C, 5 kg
Diameter tolerance	± 0,07 mm		
Weight	600 g of filament (+ 230 g spool)		

Mechanical properties	Typical Value	Test Method	Test Condition
Tensile strength	23,0 MPa	ISO 527	
Elongation at break	20 %	ISO 527	
Tensile modulus	1400 MPa	ISO 527	
Charpy impact strength	184 kJ/m ²	ISO 179-1/1eU	25 °C, unnotched

Chemical properties	Typical Value	Test Method	Test Condition
Polymer base	polypropylene		
Resistance against water, acetone, acids, alkalis, alcohols, salts	good		25 °C
Resistance against oils, greases, car fluids, ozone	medium		25 °C

Printing properties	Recommended	Notes
Print temperature	225-245 °C	Recommended settings! It may differ according to the printer and the object.
Hot pad	90-105 °C	Try your own settings before printing.
Bed adhesive	Magigoo PP	Use of adhesive is necessary due to nonpolar polymer structure. Always use brim for better bed adhesion.
Type of bed	PP plate, mirror/glass	
Speed of printing	20-40 mm/s	

Workability of 3D printing filament is at least 12 months from delivery.

The information was processed with the best knowledge of the manufacturer and it is for information only.