

Technical Datasheet ABS

General information

trade name	Octofiber ABS Filament
polymer name	Acrylonitrile Butadiene Styrene

Filament specifications

Trade diameter	1.75mm		3mm	
physical diameter	1.75	mm	2.85	mm
tolerance	0.05	mm	0.10	mm

Material specifications

Property	Value	Unit	Test Method
<i>Physical</i>			
density	1.03	g/cm ³	ISO 1183/B
melt mass flow rate (MFR)	5.6	g/10min	ISO 1133
<i>Mechanical</i>			
strength, flexural	52	MPa	ISO 178
tensile modulus	2050	MPa	ISO 527-2
tensile stress @ yield	38	Mpa	ISO 527-2
strain @ break	8	%	ISO 527-2
tensile izod impact strength			
-30 °C	14	kJ/m ²	ISO 180-A
23 °C	36	kJ/m ²	ISO 180-A
<i>Thermal</i>			
heat deflection temperature under load			
50 N, 50 °C/h	90	°C	ISO 306
10 N, 50 °C/h	103	°C	ISO 306
linear thermal expansion	0.000090	Cm/cm/°C	ISO 11359

Notes

- the above values are measured on uncolored raw material. Actual material properties may differ depending on color additives.
- properties may change depending on actual printer settings

