

ABS · Technical Data Sheet

General Features

Chemical Name Acrylonitrile Butadiene Styrene	Benefits <ul style="list-style-type: none"> • Impact resistance and toughness • UV, heat and abrasion resistance • Shiny, smooth surface when printed with heated chamber
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Filament Characteristics

Diameter	Ø 1.75mm
Meters per spool	273.520m
Weight per meter	2.74g
Tolerance	±0.05mm

Material Properties

		Typical value	Test Method
Specific gravity	g/cc	1,04	ISO 1183
MFR 220°C/10 kg	g/10 min	19,7	ISO 1133
Tensile strength at yield	MPa	45	ISO 527
Elongation at yield	%	2,6	ISO 527
Elongation at break	%	10	ISO 527 1/2
Tensile modulus	MPa	2300	ISO 527
Impact strength - Charpy method 23°C, notched	kJ/m ²	22	ISO 179
Printing temp.	±10°C	245	DF
Melting temp.	±20°C	240	ISO 294
Vicat softening temperature	°C	105	ISO 306 A
Heat Deflection Temperature B	°C	99	ISO 75

Mechanical Specifications

	Injection Moulded	3D-Printed X-Y	3D-Printed Z
Young's Modulus [MPa]	2658	3087	2967
Stress at Yield [MPa]	46	43	30
Stress at Break [MPa]	40	38	30
Strain at Yield [%]	2	2	2
Strain at Break [%]	3	8	2

Disclaimer:

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