

# Technical Data Sheet



## Product name: Premium ABS

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Version: v2

Premium ABS is a no-nonsense, very impact resistant and high-end ABS (Acrylonitrile Butadiene Styrene ) type of 3D printer filament.

Premium ABS is slightly modified to assure a great thermal stability and flowing behaviour, which is essential for 3D printing. Premium ABS might be our entry-level ABS filament, but still it outperforms many other ABS type of 3D printer filaments by far when it comes to printer friendliness and reduced warping.

Properties	Typical value	Test Method	Test condition
<b>Physical</b>			
Specific gravity	1.03 g/cc	ISO 1183	-
Melt flow rate	5.5 cm <sup>3</sup> /10min	ISO 1133	220° C/10Kg
Water absorption	1.04%	ISO 62	Saturated at 23° C
Moisture absorption	0.23%	ISO62	Equilibrium 23° C/50% RH
<b>Mechanical</b>			
Impact strength	29 KJ/m <sup>2</sup>	ISO 180/A	Izod Notched @23° C (73° F)
Tensile strength	36 Mpa	ISO 527	Stress @ Yield 23° C
Tensile modulus	1860 Mpa	ISO 527	-
Elongation at break	9%	ISO 527	Nominal Strain at Break, 23° C
Flexural strength	± 65.7 Mpa	-	-
Flexural modulus	± 2148 Mpa	-	-
Hardness	71 Mpa	ISO 2039-1	Ball Indentation Hardness
<b>Thermal</b>			
Print temperature	± 220 - 270° C	-	-
Melting temperature	± 145 ± 10° C	ISO 294	-
Viscat softening temp.	± 92° C	ISO 306	VST/A/50 (50° C/h, 10N)
<b>Optical</b>			
Haze	-	-	-
Transmittance	-	-	-
Gloss	-	-	-

Product details, certifications and compliance		Diameter	Tolerance	Roundness
HS Code	39169090	1.75mm	± 0.05mm	≥ 95%
REACH compliant	Yes	2.85mm	± 0.10mm	≥ 95%
RoHS certified	Yes			
FDA compliant	Yes			

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