

# Technical Data Sheet



## Product name: Premium ABS

Version: v3

Premium ABS is our entry-level no-nonsense ABS filament, which is very impact resistant. Even though Premium ABS might be our entry-level ABS filament, it still outperforms many other ABS type of 3D printer filaments by far when it comes to printer friendliness and reduced warping. Premium ABS has a great thermal stability and flowing behaviour, which is essential for 3D printing.

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	1.75mm	± 0.05mm	≥ 95%
REACH compliant	2.85mm	± 0.10mm	≥ 95%
RoHS certified			

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