



# Technical Data Sheet

**Product name: ABS ULTRA**

**Version: v3**

ABS ULTRA is an industrial-grade, high-performance and FFF/FDM-optimized ABS based engineering filament. ABS ULTRA is the evolution of ABS into a warp-free filament with unsurpassed mechanical properties and is extremely suitable for 3D printing large scale and high precision engineering objects. ABS ULTRA is truly FFF/FDM-optimized as it has zero warping, a perfect interlayer adhesion and can be printed directly on a heated glass plate without any adhesives or tapes to be used.

Properties	Typical value	Test Method	Test condition
<b>Physical</b>			
Specific gravity	1.10 g/cc	ISO 1183	-
Melt flow rate	41 g/10min	ISO 1133	260° C/5Kg
Water absorption	-	-	-
Moisture absorption	-	-	-
<b>Mechanical</b>			
Impact strength	58 KJ/m <sup>2</sup>	ISO 179	Charpy Notched @23° C (73° F)
Tensile strength	43.6 Mpa	ISO 527	@Yield 50mm/min (2 inch/min)
Tensile modulus	2030 Mpa	ISO 527	1mm/min
Elongation at break	34%	ISO 527	@ Break 50mm/min (2 inch/min)
Flexural strength	-	-	-
Flexural modulus	-	-	-
Hardness	-	-	-
<b>Thermal</b>			
Print temperature	± 240 - 260° C	-	-
Melting temperature	± 235 ± 10° C	ISO 294	-
Viscat softening temp.	± 97° 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			

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