

# Technical Data Sheet



**Product name:** HDglass™

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**Version:** v4

HDglass™ is an amorphous, ultra-transparent and high strength & performance modified PETG (PolyEthylene Terephthalate Glycol-modified) type of 3D printer filament. HDglass™ is developed/modified to have an impressive thermal stability and by that perfect 3D printing flowing behaviour, resulting in a very easy to print 3D printer filament with a remarkable transparency and excellent properties with respect to strength, toughness and temperature resistance.

Properties	Typical value	Test Method	Test condition
<b>Physical</b>			
Specific gravity	1.27 g/cc	ASTM D792	-
Melt flow rate	-	-	-
Water absorption	-	-	-
Moisture absorption	0.13%	ASTM D570	-
<b>Mechanical</b>			
Impact strength	7.2 KJ/m <sup>2</sup>	ASTM D256	Izod Notched @23° C (73° F)
Tensile strength	50Mpa	ASTM D638	@Yield 50mm/min (2 inch/min)
Tensile modulus	1940 Mpa	ISO 527	1mm/min
Elongation at break	120%	ASTM D638	50mm/min (2 inch/min)
Flexural strength	70.6 Mpa	ASTM D790	1.27mm/min (0.05 inch/min)
Flexural modulus	2147.6 Mpa	ASTM D790	1.27mm/min (0.05 inch/min)
Hardness	105	ASTM D785	Rockwell R-scale
<b>Thermal</b>			
Print temperature	± 195 - 225° C	-	-
Melting temperature	-	-	-
Viscat softening temp.	± 70° C	ASTM D648	@ 0.455 Mpa (66psi)
<b>Optical</b>			
Haze	<1.0%	ASTM D1003	-
Transmittance	90%	ASTM D1003	-
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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