

Technical Data Sheet



Product name: HDglass™

Version: v3

HDglass is a high performance filament based on an unique PETG blend resulting in an amorphous, high strength, high gloss and ultra-transparent 3D printer filament.

HD stands for "Heavy Duty", as HDglass is developed to have an optimal thermal stability and by that perfect 3D printing flowing behaviour, resulting in a very easy to print 3D printer filament with a remarkable high gloss, transparency and excellent properties with respect to strength, toughness and temperature resistance.

Properties	Typical value	Test Method	Test condition
Physical			
Specific gravity	1.27 g/cc	ASTM D792	-
Melt flow rate	-	-	-
Water absorption	-	-	-
Moisture absorption	0.13%	ASTM D570	-
Mechanical			
Impact strength	7.2 KJ/m ²	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
Thermal			
Print temperature	± 195 - 225° C	-	-
Melting temperature	-	-	-
Viscat softening temp.	± 70° C	ASTM D648	@ 0.455 Mpa (66psi)
Optical			
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			

Formfutura BV	CoC: 69099502	Tel: +31 (0)85 002 0881
Groenestraat 215	VAT: NL857733709B01	Email: info@formfutura.com
6531 HH Nijmegen	EORI: NL857733709	Website: www.formfutura.com
The Netherlands		

All information supplied by or on behalf of Formfutura in relation to its products, whether in the nature of data, recommendations or otherwise, is supported by research and, in good faith, believed reliable, but Formfutura assumes no liability and makes no warranties of any kind, express or implied, including, but not limited to, those of title, merchantability, fitness for a particular purpose or non-infringement or any warranty arising from a course of dealing, usage, or trade practice whatsoever in respect of application, processing or use made of the forementioned information or product. The user assumes all responsibility for the use of all information provided and shall verify quality and other properties or any consequence from the use of all such information. Typical values are indicative only and are not to be construed as being binding specifications.