## **Technical Data Sheet**



**Product name:** TitanX™

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Version: v

TitanX™ is a revolutionary new high-performance and FDM-optimized engineering ABS (Acrylonitrile Butadiene Styrene) type of 3D printer filament with strongly improved mechanical properties and by its FDM-optimization – zero warping, superb first layer adhesion to glass/kapton/pet/adhesives, perfect interlayer adhesion, thermal stability and filament flowing behavior – it is a very easy to print material.

TitanX<sup>™</sup> can be printed directly on a heated glass print bed and by its high impact strength and FDM-optimization it is a perfect material for 3D printing large scale engineering objects.

Properties	Typical value	Test Method	Test condition	
Physical				
Specific gravity	1.10 g/cc	ISO 1183	-	
Melt flow rate	41 g/10min	ISO 1133	260° C/5Kg	
Water absorption	-	-	-	
Moisture absorption	-	-	-	
Mechanical				
Impact strength	58 KJ/m²	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	lmm/min	
Elongation at break	34%	ISO 527	@ Break 50mm/min (2 inch/min)	
Flexural strength	-	-	-	
Flexural modulus	-	-	-	
Hardness	-	-	-	
Thermal				
Print temperature	± 240 - 260° C	-	-	
Melting termperature	± 235 ± 10° C	ISO 294	-	
Viscat softening temp.	± 97° C	ISO 306	VST/A/50 (50° C/h, 10N)	
Optical				
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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