

PAHT Carbon F. TDS

High-Temperature Polyamide with Carbon Fiber for FDM 3D Printers

Product Description

AzureFilm PAHT Carbon Fiber is a high temperature polyamide based material. This 3D Filament is high performance material for industrial 3D printing. Is temperature resistant up to 160°C and can be used for printing durable end user parts.

Properties

Physical properties		Test method		Value	
Material		PAHT Carbon Fiber		Color Black	
Specific gravity		ISO 1183-3	1,24 g/cm3		
Water absorption		23°C / 24h ISO 62	< 0,3 %		
Mechanical properties at 23°C	/ 50%	rh			
Tensile strength		ISO 527	130 MPa		
Elongation at maximum force		ISO 527		2 %	
Modulus of elasticity	ISO 527			11,5 GPa	
Charpy impact strength	ISO 179			35 kJ/m2	
Thermal properties					
Heat distortion temperature	ISO 75			90 °C	
Continuous service temp.	20.000 h IEC 60216			120 °C	
Service temperature	During lifetime max. 200h ISO 3167 A			160 °C	
Electrical properties					
Insulation resistance strip electrode		DIN IEC 60167		≤10² Ω	
Surface resistance		DIN IEC 60093		<10² Ω	

Printing Recommendations

Nozzle temperature: 270 – 290°C Heated bed: recommended 90-120 °C Print speed: 40 – 60 mm/s Layer height: 0,2 mm Nozzle diameter: 0,6 mm Build platform: Blue tape, Kapton tape, glass bed + Dimafix spray

The technical information contained on this sheet is furnished without charge or obligation and accepted at the recipient's sole risk. The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided should not be used to establish specification limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since we cannot antcipate all variations in actual end-use conditions, AzureFilm d.o.o. makes no warranties and assumes no liability in connection with any use of this information.