Arnitel®

Arnitel® ID 2045

TPC

>50% Renewable Content, 3D printing grade

Print Date: 2017-11-03

The mechanical data is tested on printed tensile bars, printed in two directions: 0°-90° and 45°-45°

Properties	Typical Data	Unit	Test Method
Thermal properties	Value		
Melting temperature (10°C/min)	158	°C	ISO 11357-1/-3
Glass transition temperature (10°C/min)	-35	°C	ISO 11357-1/-2
Vicat softening temperature (50°C/h 10N)	90	°C	ISO 306
Electrical properties	Value		
Volume resistivity	>1E13	Ohm*m	IEC 60093
Electric strength	20	kV/mm	IEC 60243-1
Other properties	Value		
Humidity absorption	0.04	%	Sim. to ISO 62
Density	1100	kg/m³	ISO 1183
Material specific properties	Value		
Maximum tensile stress (3D printed tensile bars) 0°-90°	8	MPa	ISO 527-1/-2
Maximum tensile stress (3D printed tensile bars) 45°-45°	7.6	MPa	ISO 527-1/-2
Tensile modulus (3D printed tensile bars) 0°-90°	29	MPa	ISO 527-1/-2
Tensile modulus (3D printed tensile bars) 45°-45°	29	MPa	ISO 527-1/-2
Elongation at break (3D printed tensile bars) 0°-90°	350	%	ISO 527-1/-2
Elongation at break (3D printed tensile bars) 45°-45°	390	%	ISO 527-1/-2
Shore D Hardness (3s)	34	-	ISO 868