

Technical Data Sheet

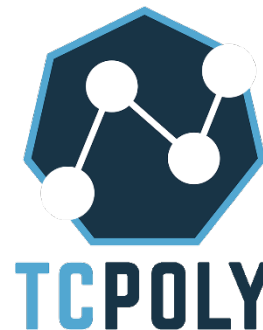
Ice9™ PETG

Thermally conductive, electrically non-insulating plastic

Filament product code: TC-PETG-175-1000

Pellet product code: TC-PETG-000-1000

Properties based on 3D printed samples



GENERAL PROPERTIES		VALUE		
Base Material		Polyethylene terephthalate glycol		
Color		Dark gray		
Density		1350 kg/m ³		
THERMAL PROPERTIES		METRIC	ENGLISH	ASTM
Thermal conductivity, in-plane		3 W/m-K	54 BTU·in/hr·ft ² ·°F	E1461
Thermal conductivity, through-plane		0.8 W/m-K	17 BTU·in/hr·ft ² ·°F	E1461
Specific heat		1150 J/kg-K	0.27 BTU/lb·°F	E1269
Coefficient of thermal expansion		51 ppm/°C	28 ppm/°F	E831
Heat deflection temperature, 0.455 MPa		120 °C	248 °F	D648
Max. continuous temperature		150 °C	302 °F	*
MECHANICAL PROPERTIES		METRIC	ENGLISH	ASTM
Shore Hardness		75 D		D785
Flexural Modulus		1.9 GPa	275 ksi	D638
Tensile Strength @ Break		51 MPa	7 ksi	D638
Elongation @ Break		5 %	5 %	D638
Impact strength, Izod notched @ 23°C		95 J/m	1.8 lb-ft/in	D256
ELECTRICAL PROPERTIES		METRIC		ASTM
Volume resistivity		>10 ⁸ Ω-cm		D257

* Highest temperature recommended for operation of more than 1 hour and is based internal testing and not any recognized standard.

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