



**Product Data Sheet &
General Processing Conditions**

ESD C 1080
Polybutylene Terephthalate (PBT)
Carbon Fiber
ESD Protection
Electrically Conductive

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.35	1.35	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0010 - 0.0030 in/in	0.10 - 0.30 %	D 955

MECHANICAL

Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	0.8 ft-lbs/in	40 J/m	D 256
unnotched 1/8 in (3.2 mm) section	8.0 ft-lbs/in	427 J/m	D 4812
Tensile Strength	15000 psi	103 MPa	D 638
Tensile Elongation	2.0 - 3.0 %	2.0 - 3.0 %	D 638
Tensile Modulus	1.40 x 10 ⁶ psi	9653 MPa	D 638
Flexural Strength	22000 psi	152 MPa	D 790
Flexural Modulus	1.20 x 10 ⁶ psi	8274 MPa	D 790

ELECTRICAL

Volume Resistivity	< 1E3 ohm.cm	< 1E3 ohm.cm	D 257
Surface Resistivity	< 1E6 ohm/sq	< 1E6 ohm/sq	D 257
Surface Resistance	< 1E5 ohm	< 1E5 ohm	ESD STM11.11
Static Decay			ESD STM11.11
MIL-PRF-81705D, 5kV to 50 V, 12% RH	< 2.00 s	< 2.00 s	FTMS101C 4046.1

THERMAL

Ignition Resistance*			
Flammability**	HB @ 1/16 in	HB @ 1.5 mm	D 635

PROPERTY NOTES

Data herein is typical and not to be construed as specifications.

Unless otherwise specified, all data listed is for natural or black colored materials. Pigments can affect properties.

* This rating is not intended to reflect hazards of this or any other material under actual fire conditions.

** Values per RTP Company testing.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	460 - 520 °F	238 - 271 °C
Mold Temperature	175 - 225 °F	79 - 107 °C
Drying	4 hrs @ 250 °F	4 hrs @ 121 °C
Moisture Content	0.03 %	0.03 %
Dew Point	-20 °F	-29 °C

PROCESSING NOTES

Desiccant Type Dryer Required.