



**Product Data Sheet &
General Processing Conditions**

**ESD C 280
Nylon 6/6 (PA)
Carbon Fiber
ESD Protection
Electrically Conductive**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.20	1.20	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0015 - 0.0035 in/in	0.15 - 0.35 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.0 ft-lbs/in	53 J/m	D 256
unnotched 1/8 in (3.2 mm) section	8.0 ft-lbs/in	427 J/m	D 4812
Tensile Strength	25000 psi	172 MPa	D 638
Tensile Elongation	2.0 - 4.0 %	2.0 - 4.0 %	D 638
Tensile Modulus	1.50 x 10 ⁶ psi	10342 MPa	D 638
Flexural Strength	35000 psi	241 MPa	D 790
Flexural Modulus	1.30 x 10 ⁶ psi	8964 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 MIL-PRF-81705D, 5kV to 50 V, 12% RH	< 0.50 s	< 0.50 s	FTMS101C 4046.1

THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	480 °F	249 °C	D 648
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 - 18000 psi	69 - 124 MPa
Melt Temperature	530 - 570 °F	277 - 299 °C
Mold Temperature	150 - 225 °F	66 - 107 °C
Drying	4 hrs @ 175 °F	4 hrs @ 79 °C
Moisture Content	0.20 %	0.20 %
Dew Point	0 °F	-18 °C

PROCESSING NOTES

Desiccant Type Dryer Required.