



**Product Data Sheet &
General Processing Conditions**

**PermaStat® 203 A
Nylon 6 (PA)
Glass Fiber
ESD Protection
Permanently Static Dissipative**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	20 %	20 %	
Specific Gravity	1.27	1.27	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0020 - 0.0040 in/in	0.20 - 0.40 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.5 ft-lbs/in	80 J/m	D 256
unnotched 1/8 in (3.2 mm) section	12.0 ft-lbs/in	641 J/m	D 4812
Tensile Strength	10000 psi	69 MPa	D 638
Tensile Elongation	3.0 - 5.0 %	3.0 - 5.0 %	D 638
Tensile Modulus	0.65 x 10 ⁶ psi	4482 MPa	D 638
Flexural Strength	15000 psi	103 MPa	D 790
Flexural Modulus	0.55 x 10 ⁶ psi	3792 MPa	D 790

ELECTRICAL

Volume Resistivity	1.0e9 - 9.9e10 ohm.cm	1.0e9 - 9.9e10 ohm.cm	D 257
Surface Resistivity	1.0e10 - 9.9e11 ohm/sq	1.0e10 - 9.9e11 ohm/sq	D 257
Surface Resistance	1.0e9 - 9.9e10 ohm	1.0e9 - 9.9e10 ohm	ESD STM11.11
Static Decay MIL-PRF-81705D, 5kV to 50 V, 12% RH	< 2.00 s	< 2.00 s	FTMS101C 4046.1

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.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	380 - 460 °F	193 - 238 °C
Mold Temperature	150 - 200 °F	66 - 93 °C
Drying	4 hrs @ 175 °F	4 hrs @ 79 °C
Moisture Content	0.20 %	0.20 %
Dew Point	0 °F	-18 °C

PROCESSING NOTES

Do not exceed 520 °F (270 °C) melt temperature.
Desiccant Type Dryer Required.