




**Product Data Sheet &
General Processing Conditions**

**PermaStat® 600 FR
Acrylonitrile Butadiene Styrene
(ABS)
ESD Protection
Permanently Anti-static
Flame Retardant**



PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.27	1.27	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0050 - 0.0070 in/in	0.50 - 0.70 %	D 955
Water Absorption, 24 hrs @ 23°C	0.300 %	0.300 %	D 570

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	19.0 ft-lbs/in	1014 J/m	D 4812
Tensile Strength	5500 psi	38 MPa	D 638
Tensile Elongation	> 10.0 %	> 10.0 %	D 638
Tensile Modulus	0.31 x 10 ⁶ psi	2137 MPa	D 638
Flexural Strength	9100 psi	63 MPa	D 790
Flexural Modulus	0.31 x 10 ⁶ psi	2137 MPa	D 790

ELECTRICAL

Volume Resistivity	1E+09 - 9.9E+10 ohm.cm	1E+09 - 9.9E+10 ohm.cm	D 257
Surface Resistivity	1E+10 - 9.9E+11 ohm/sq	1E+10 - 9.9E+11 ohm/sq	D 257
Surface Resistance	1E+09 - 9.9E+10 ohm	1E+09 - 9.9E+10 ohm	ESD STM11.11
Static Decay MIL-PRF-81705D, 5kV to 50 V, 12% RH	< 2.00 s	< 2.00 s	FTMS101C 4046.1

THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	180 °F	82 °C	D 648
@ 66 psi (455 kPa)	200 °F	93 °C	D 648
Ignition Resistance* Flammability	V-0 @ 1/16 in	V-0 @ 1.5 mm	UL94

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.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	390 - 460 °F	199 - 238 °C
Mold Temperature	120 - 200 °F	49 - 93 °C
Drying	2 hrs @ 180 °F	2 hrs @ 82 °C
Moisture Content	0.10 %	0.10 %
Dew Point	0 °F	-18 °C

PROCESSING NOTES

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