



**Product Data Sheet &  
General Processing Conditions**

**PermaStat® 100 FR  
Polypropylene (PP)  
Flame Retardant  
Permanently Anti-static  
ESD Protection**

**PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS**

<b>PERMANENCE</b>	<b>English</b>	<b>SI Metric</b>	<b>ASTM TEST</b>
Specific Gravity	1.23	1.23	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0100 - 0.0150 in/in	1.00 - 1.50 %	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	No Break	No Break	D 4812
Tensile Strength	3300 psi	23 MPa	D 638
Tensile Elongation	> 10.0 %	> 10.0 %	D 638
Tensile Modulus	0.15 x 10 <sup>6</sup> psi	1034 MPa	D 638
Flexural Strength	6000 psi	41 MPa	D 790
Flexural Modulus	0.18 x 10 <sup>6</sup> psi	1241 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

**THERMAL**

Ignition Resistance* Flammability**	V-0 @ 1/16 in	V-0 @ 1.5 mm	D 3801
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**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**

	<b>English</b>	<b>SI Metric</b>
Injection Pressure	7000 - 11000 psi	48 - 76 MPa
Melt Temperature	340 - 400 °F	171 - 204 °C
Mold Temperature	90 - 150 °F	32 - 66 °C
Drying	2 hrs @ 175 °F	2 hrs @ 79 °C
Moisture Content	0.10 %	0.10 %

**PROCESSING NOTES**

Do not exceed 520 °F (270 °C) melt temperature.