



**Product Data Sheet &
General Processing Conditions**

**ESD C 100 FR
Polypropylene (PP)
Flame Retardant
ESD Protection
Electrically Conductive**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.36	1.36	D 792
Melt Flow Rate @ 230 °C, / 2.16 kg	0.50 - 1.00 g/10 min	0.50 - 1.00 g/10 min	D 1238
Molding Shrinkage 1/8 in (3.2 mm) section	0.0090 - 0.0130 in/in	0.90 - 1.30 %	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	12.5 ft-lbs/in	667 J/m	D 4812
Tensile Strength	2500 psi	17 MPa	D 638
Tensile Elongation	6.0 - 10.0 %	6.0 - 10.0 %	D 638
Tensile Modulus	0.22 x 10 ⁶ psi	1517 MPa	D 638
Flexural Strength	4800 psi	33 MPa	D 790
Flexural Modulus	0.23 x 10 ⁶ psi	1586 MPa	D 790

ELECTRICAL

Volume Resistivity	< 1E1 ohm.cm	< 1E1 ohm.cm	D 257
Surface Resistivity	< 1E4 ohm/sq	< 1E4 ohm/sq	D 257
Surface Resistance	< 1E3 ohm	< 1E3 ohm	ESD STM11.11
Static Decay			ESD STM11.11
MIL-PRF-81705D, 5kV to 50 V, 12% RH	< 0.50 s	< 0.50 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

	English	SI Metric
Injection Pressure	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	375 - 450 °F	191 - 232 °C
Mold Temperature	90 - 150 °F	32 - 66 °C
Drying	2 hrs @ 175 °F	2 hrs @ 79 °C