



Product Data Sheet & General Processing Conditions

ESD C 100 Polypropylene (PP) ESD Protection Electrically Conductive Standard (Low) MFR

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.00	1.00	D 792
Melt Flow Rate @ 230 °C, / 2.16 kg	0.50 - 2.00 g/10 min	0.50 - 2.00 g/10 min	D 1238
Molding Shrinkage 1/8 in (3.2 mm) section	0.0120 - 0.0170 in/in	1.20 - 1.70 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	10.0 ft-lbs/in	534 J/m	D 256
unnotched 1/8 in (3.2 mm) section	No Break	No Break	D 4812
Tensile Strength	3000 psi	21 MPa	D 638
Tensile Elongation	> 10.0 %	> 10.0 %	D 638
Tensile Modulus	0.17 x 10 ⁶ psi	1172 MPa	D 638
Flexural Strength	4000 psi	28 MPa	D 790
Flexural Modulus	0.16 x 10 ⁶ psi	1103 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	< 2.00 s	< 2.00 s	FTMS101C 4046.1

THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	125 °F	52 °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 - 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

PROCESSING NOTES

This information is intended to be used only as a guideline for designers and processors of modified thermoplastics. Because design and processing is complex, a set solution will not solve all problems. Observation on a "trial and error" basis may be required to achieve desired results.

Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein. Properties may be materially affected by molding techniques applied and by the size and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed.

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