



**Product Data Sheet &
General Processing Conditions**

**RTP 799 X 116773
High Density Polyethylene (HDPE)
Electrically Conductive
Thermally Conductive**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.49	1.49	D 792
Melt Flow Rate @ 190 °C, / 2.16 kg	0.30 g/10 min	0.30 g/10 min	D 1238
Molding Shrinkage 1/8 in (3.2 mm) section	0.0065 in/in	0.65 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	0.5 ft-lbs/in	27 J/m	D 256
unnotched 1/8 in (3.2 mm) section	1.9 ft-lbs/in	101 J/m	D 4812
Tensile Strength	4100 psi	28 MPa	D 638
Tensile Elongation	1.6 %	1.6 %	D 638
Tensile Modulus	0.90 x 10 ⁶ psi	6206 MPa	D 638
Flexural Strength	6600 psi	46 MPa	D 790
Flexural Modulus	0.80 x 10 ⁶ psi	5516 MPa	D 790

ELECTRICAL

Volume Resistivity	1E-1 - 1E2 ohm.cm	1E-1 - 1E2 ohm.cm	D 257
Surface Resistivity	< 1E5 ohm/sq	< 1E5 ohm/sq	D 257
Surface Resistance	< 1E4 ohm	< 1E4 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

Thermal Conductivity Through-plane	15.28 (BTU.in)/(hr.ft ² .°F)	2.20 W/(m.K)	E 1530
---------------------------------------	---	--------------	--------

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 - 450 °F	193 - 232 °C
Mold Temperature	70 - 150 °F	21 - 66 °C
Drying	2 hrs @ 175 °F	2 hrs @ 79 °C