




**Product Data Sheet &
General Processing Conditions**

**RTP 2582 HEC FR
Polycarbonate/ABS Alloy (PC/ABS)
Nickel-Coated Carbon Fiber
EMI/RFI Shielding
Electrically Conductive
Flame Retardant
UL94 V-0**



PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	15 %	15 %	
Specific Gravity	1.37	1.37	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0005 - 0.0025 in/in	0.05 - 0.25 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	0.7 ft-lbs/in	37 J/m	D 256
unnotched 1/8 in (3.2 mm) section	5.8 ft-lbs/in	310 J/m	D 4812
Tensile Strength	16400 psi	113 MPa	D 638
Tensile Elongation	1.0 - 2.0 %	1.0 - 2.0 %	D 638
Tensile Modulus	1.20 x 10 ⁶ psi	8274 MPa	D 638
Flexural Strength	22000 psi	152 MPa	D 790
Flexural Modulus	1.20 x 10 ⁶ psi	8274 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	< 0.50 s	< 0.50 s	FTMS101C 4046.1

THERMAL

Ignition Resistance*			
Flammability	V-0 @ 1/16 in	V-0 @ 1.5 mm	UL94
Flammability	5VA @ 1/8 in	5VA @ 3.0 mm	UL94

EMI

Shielding Effectiveness @ 2 mm thickness	73 dB @ 300 MHz	73 dB @ 300 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	81 dB @ 500 MHz	81 dB @ 500 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	87 dB @ 700 MHz	87 dB @ 700 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	95 dB @ 1000 MHz	95 dB @ 1000 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	100 dB @ 1300 MHz	100 dB @ 1300 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	105 dB @ 1500 MHz	105 dB @ 1500 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	80 dB @ 300 MHz	80 dB @ 300 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	88 dB @ 500 MHz	88 dB @ 500 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	95 dB @ 700 MHz	95 dB @ 700 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	100 dB @ 1000 MHz	100 dB @ 1000 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	101 dB @ 1300 MHz	101 dB @ 1300 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	102 dB @ 1500 MHz	102 dB @ 1500 MHz	D 4935

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	470 - 525 °F	243 - 274 °C
Mold Temperature	125 - 200 °F	52 - 93 °C
Drying	4 hrs @ 200 °F	4 hrs @ 93 °C
Moisture Content	0.02 %	0.02 %
Dew Point	-20 °F	-29 °C

PROCESSING NOTES

Remove hopper magnets.
Desiccant Type Dryer Required.

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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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