

Product Data Sheet & General Processing Conditions

EMI 1062 Polybutylene Terephthalate (PBT) Stainless Steel Fiber Electrically Conductive EMI/RFI/ESD Protection

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	15 %	15 %	
Specific Gravity	1.49	1.49	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	0.7 ft-lbs/in	37 J/m	D 256
unnotched 1/8 in (3.2 mm) section	10.0 ft-lbs/in	534 J/m	D 4812
Tensile Strength	8500 psi	59 MPa	D 638
Tensile Elongation	> 10.0 %	> 10.0 %	D 638
Tensile Modulus	0.45 x 10^6 psi	3103 MPa	D 638
Flexural Strength	13500 psi	93 MPa	D 790
Flexural Modulus	0.44 x 10^6 psi	3034 MPa	D 790
ELECTRICAL			
Volume Resistivity	< 1 ohm.cm	< 1 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			
MIL-PRF-81705D, 5kV to 50 V, 12% RH	< 2.00 s	< 2.00 s	FTMS101C 4046.1

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 - 430 °F	193 - 221 °C	
Mold Temperature	145 - 180 °F	63 - 82 °C	
Drying	4 hrs @ 250 °F	4 hrs @ 121 °C	
Moisture Content	0.03 %	0.03 %	
Dew Point	-20 °F	-29 °C	
PROCESSING NOTES			

Use a reverse barrel profile. Remove hopper magnets. Allow 4 - 5 shots to properly disperse the conductive fibers. The surface finish should have a silver streaking appearance, not clumps. Desiccant Type Dryer Required.

20 Feb 2009 GJF

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.

No information supplied by RTP Company constitutes a warranty regarding product performance or use. Any information regarding performance or use is only offered as suggestion for investigation for use, based upon RTP Company or other customer experience. RTP Company makes no warranties, expressed or implied, concerning the suitability or fitness of any of its products for any particular purpose. It is the responsibility of the customer to determine that the product is safe, lawful and technically suitable for the intended use. The disclosure of information herein is not a license to operate under, or a recommendation to infringe any patents.

RTP COMPANY • 580 EAST FRONT STREET • WINONA, MN 55987 • 507-454-6900