

PROPERTIES & AVERAGE VALUES OF IN JECTION MOLIDED SPECIMENS

Product Data Sheet & General Processing Conditions

## ESD C 2800 B-55A Black Thermoplastic Vulcanizate (TPV) Electrically Conductive ESD Protection

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.02	1.02	D 792
MECHANICAL			
Tensile Strength			
Break, Die C, 0.125 in, 20 in/min (3.2mm, 500 mm/min)	840 psi	6 MPa	D 412
Tensile Elongation			
Break, Die C, 0.125 in, 20 in/min (3.2mm, 500 mm/min)	450.0 %	450.0 %	D 412
Tensile Stress			
Die C 0.125 in, 20 in/min (3.2 mm, 500 mm/min)	000.0	4.0 MD	D 110
@ 100 %	280.0 psi	1.9 MPa	D 412
Tear Strength, Die C Hardness	150.0 pli	26.3 N/mm	D 624
Shore A, 10 s delay	58	58	D 2240
ELECTRICAL			
Volume Resistivity	< 1E3 ohm.cm	< 1E3 ohm.cm	D 257
Surface Resistivity	< 1E5 ohm/sq	< 1E5 ohm/sq	D 257
Static Decay			
MIL-PRF-81705D, 5kV to 50 V, 12% RH	< 2.00 s	< 2.00 s	FTMS101C 4046.1
THERMAL			
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	12000 - 18000 psi	83 - 124 MPa
Melt Temperature	360 - 410 °F	182 - 210 °C
Mold Temperature	60 - 150 °F	16 - 66 °C
Drying	2 hrs @ 175 °F	2 hrs @ 79 °C
Moisture Content	0.03 %	0.03 %
Dew Point	0 °F	-18 °C

## PROCESSING NOTES

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