

DATA SHEET

FLUOROSINT® 207 PTFE - COMPRESSION MOLDED SYNTHETIC MICA-FILLED PTFE

Property	Units	Test Method	Typical Average Values
Mechanical			
Specific Gravity, 73° F.	-	ASTM D 792	2.30
Tensile Strength, 73° F.	psi	ASTM D 638	1,500
Tensile Modulus of Elasticity, 73° F.	psi	ASTM D 638	250,000
Tensile Elongation (at break), 73° F.	%	ASTM D 638	50
Flexural Strength, 73° F.	psi	ASTM D 790	2,000
Flexural Modulus of Elasticity, 73° F.	psi	ASTM D 790	350,000
Shear Strength, 73° F.	psi	ASTM D 732	1,700
Compressive Strength, 10% Deformation, 73° F.	psi	ASTM D 695	3,800
Compressive Modulus of Elasticity, 73° F.	psi	ASTM D 695	225,000
Hardness, Rockwell, Scale as noted, 73°F	-	ASTM D 785	R50
Hardness, Durometer, Shore "D" Scale, 73°F	-	ASTM D 2240	D65
Izod Impact (notched), 73° F.	ft.lb./in.	ASTM D 256 Type "A"	1.0
Coefficient of Friction (Dry vs. Steel) Dynamic	-	PTM 55007	0.10
Limiting PV (with 4:1 safety factor applied)	ft.lbs.in. ² min.	PTM 55007	8,000
Wear Factor "k" x 10 ⁻¹⁰	in. ³ -min/ft. lbs. hr.	PTM 55010	30
Thermal			
Coefficient of Linear Thermal Expansion (-40°F to 300°F)	in./in./°F	ASTM E-831 (TMA)	5.70 x 10 ⁻⁵
Heat Deflection Temperature 264 psi	°F	ASTM D 648	210
Tg-Glass Transition (amorphous)	°F	ASTM D 3418	N/A
Melting Point (crystalline) peak	°F	ASTM D 3418	621
Continuous Service Temperature in Air (Max.)(1)	°F	-	500
Thermal Conductivity	BTU in./hr.ft. ² °F	-	-

Continued on page 2

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FLUOROSINT® 207 PTFE - COMPRESSION MOLDED SYNTHETIC MICA-FILLED PTFE (page 2)

Property	Units	Test Method	Typical Average Values
Electrical			
Dielectric Strength, Short Term	Volts/mil	ASTM D 149	200
Surface Resistivity	ohm/square	EOS/ESD S11.11	$>10^{12}$
Dielectric Constant, 10^6 Hz	-	ASTM D 150	2.65
Dissipation Factor, 10^6 Hz	-	ASTM D 150	0.008
Flammability @ 3.1 mm (1/8 in.) (5)		UL 94	V-0
Miscellaneous			
Water Absorption Immersion, 24 Hours	% by wt.	ASTM D 570(2)	0.03
Water Absorption Immersion, Saturation	% by wt.	ASTM D 570(2)	2.0

- (1) Data represent Quadrant's estimated maximum long-term service temperature based on practical field experience.
- (2) Specimens: 1/8" thick x 2" dia. or square.
- (3) **Estimated rating based on available data.** The UL 94 Test is a laboratory test and does not relate to actual fire hazard. Contact Quadrant for specific UL "Yellow Card" recognition number.

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 01/15/02
 Page 2