Delrin® Colors

.031", .062" and .125" thick Delrin sheets, 24" x 48", in a variety of colors

Mechanical Properties	Condition	Value	Test Method
Modulus of elasticity (Tensile test)	@ 73°F	350,000 psi	ASTM D 638
Tensile strength at yield		11,000 psi	ASTM D 638
Elongation at break	@ 73°F	25%	ASTM D 638
Flexural strength	@ 73°F	14,000 psi	ASTM D 790
Modulus of elasticity (Flexural test)	@ 73°F	420,000 psi	ASTM D 790
Compression strength		5,200 psi	ASTM D 695 (1)
Impact strength (IZOD)	@ 73°F	1.50 ft-lbs/in	
Rockwell hardness - M scale (R scale)	@ 73°F	94 (120)	ASTM D 785
Coefficient of friction (dynamic)	40 psi, 50 fpm	0.20	ASTM D 3702
Wear rate	40 psi, 50 fpm	55* 10 ⁻¹⁰	ASTM D 3702
Thermal Properties	Condition	Value	Test Method
Thermal Properties Melting temperature	Condition 	Value 347 °F	Test Method ASTM D 2133 (2)
Melting temperature		347 °F	ASTM D 2133 (2)
Melting temperature Deflection temperature	 @ 66 psi	347 °F 336 °F	ASTM D 2133 (2) ASTM D 648
Melting temperature Deflection temperature Deflection temperature	 @ 66 psi @ 264 psi	347 °F 336 °F 257 °F	ASTM D 2133 (2) ASTM D 648
Melting temperature Deflection temperature Deflection temperature Service temperature	 @ 66 psi @ 264 psi Intermittent	347 °F 336 °F 257 °F 300 °F	ASTM D 2133 (2) ASTM D 648 ASTM D 648
Melting temperature Deflection temperature Deflection temperature Service temperature Service temperature	 @ 66 psi @ 264 psi Intermittent	347 °F 336 °F 257 °F 300 °F 185 °F	ASTM D 2133 (2) ASTM D 648 ASTM D 648
Melting temperature Deflection temperature Deflection temperature Service temperature Service temperature Thermal expansion (CLTE)	 @ 66 psi @ 264 psi Intermittent	347 °F 336 °F 257 °F 300 °F 185 °F 6.8* 10 ⁻⁵	ASTM D 2133 (2) ASTM D 648 ASTM D 648 ASTM D 696
Melting temperature Deflection temperature Deflection temperature Service temperature Service temperature Thermal expansion (CLTE)	 @ 66 psi @ 264 psi Intermittent	347 °F 336 °F 257 °F 300 °F 185 °F 6.8* 10 ⁻⁵	ASTM D 2133 (2) ASTM D 648 ASTM D 648 ASTM D 696
Melting temperature Deflection temperature Deflection temperature Service temperature Service temperature Thermal expansion (CLTE) Specific heat	 @ 66 psi @ 264 psi Intermittent Long term 	347 °F 336 °F 257 °F 300 °F 185 °F 6.8* 10 ⁻⁵ 0.35	ASTM D 2133 (2) ASTM D 648 ASTM D 648 ASTM D 696
Melting temperature Deflection temperature Deflection temperature Service temperature Service temperature Thermal expansion (CLTE) Specific heat Electrical Properties	 @ 66 psi @ 264 psi Intermittent Long term 	347 °F 336 °F 257 °F 300 °F 185 °F 6.8* 10 ⁻⁵ 0.35	ASTM D 2133 (2) ASTM D 648 ASTM D 648 ASTM D 696 Test Method

Electrical Properties	Condition	value	rest method
Volume resistivity		>10 ¹⁵ Ω*cm	ASTM D 257
Dielectric strength		500 V/mil	ASTM D 149
Dissipation factor	@ 60 Hz, 73°F	0.005	ASTM D 150
Dielectric constant (50% RH)	@ 60 Hz, 73°F	3.70	ASTM D 150

Other Properties	Condition	Value	Test Method
Moisture absorption (saturation)	@ 73°F	0.90 %	ASTM D 570
Moisture absorption (24 hours)	@ 73°F	0.25 %	ASTM D 570
Flammability (UL94)	UL 94	HB	(3)

(1) 1% strain, injection molded

(2) Injection molded sample

(3) 1.47 mm injection mold

Resin specification:

ASTM D6778-06 POM0111 superseding ASTM D4181-00 POM111 Shapes specification:

ASTM D6100-11 S-POM0111

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