

PROPERTY	ASTM or UL TEST	COPOLYMER	HOMOPOLYMER
PHYSICAL			
SPECIFIC GRAVITY	D792	1.41	1.42
SPECIFIC GRAVITY (in3/lb)	D792	19.7	19.5
WATER ABSORPTION, 24 h, 1/8-in thk (%)	D570	0.22	0.25
MECHANICAL			
TENSILE STRENGTH (psi)	D638		
At 73°F		8,800	10,000
At 160°F		5,000	6,900
ELONGATION*	D638	55	40
TENSILE MODULUS (psi)	D638	400,000	450,000
FLEXURAL STRENGTH (psi)	D790	13,000	14,100
FLEXURAL MODULUS (psi)	D790	400,000	450,000
IMPACT STRENGTH, IZOD (ft-lb/in)	D256		
NOTCHED		1.3	1.5
UNNOTCHED		20	24
FATIGUE ENDURANCE LIMIT, 107 CYCLES (psi)	D671	3,300	4,300
HARDNESS, ROCKWELL M *At 0.2 in/min loading rate	D785	80	94
COMPRESSIVE STRENGTH (psi)	D695	15,000	16,000
COMPRESSIVE MODULUS (psi)	D695	400,000	450,000
SHEAR STRENGTH (psi)	D732	8,000	9,000
COEFFICIENT OF FRICTION	VS. STEEL	0.15	0.15
DISSIPATION FACTOR	D150	-	0.005
THERMAL			
THERMAL CONDUCTIVITY	C177		
104 cal-cm/sec-cm ² -°C)		5.5	8.9
(Btu-in/hr-ft ² -°F)		1.6	2.6
COEFFICIENT OF THERMAL EXPANSION -40 to +185°C (105 in/in-°C)	D696	8.5	10.0
DEFLECTION TEMPERATURE (°F)	D648		
AT 264 psi		205	277
AT 66 psi		316	340
FLAMMABILITY RATING	UL94	HB	HB
MAX OPERATING TEMPERATURE (°F)		180	180
ELECTRICAL			
DIELECTRIC STRENGTH (V/mil) short time)	D149		
5 mils		2,100	3,000
20 mils		-	2,000
90 mils		500	500
DIELECTRIC CONSTANT	D150		
AT 1 kHz		3.7	3.7
AT 1 MHz		0.006	0.005
VOLUME RESISTIVITY (ohm-cm) AT 73F, 50% RH	D257	10 ¹⁵	10 ¹⁵
ARC RESISTANCE (s), 120 mils	D495	240 (burns)	220 (burns, no tracking)

We cannot anticipate all conditions under which this information and our products, or the products of other manufacturers in combination with our products, may be used. We accept no responsibility for results obtained by the application of this information or the safety and suitability of our products, whether alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product or product combination for their own purposes. Unless otherwise agreed in writing, we sell the products without warranty, and buyers and users assume all responsibility and liability for loss or damage arising from the handling and use of our products, whether used alone or in combination with other products. For most recent technical information, phone in USA or in Canada.

METRIC

PROPERTY	ASTM OR UL TEST	COPOLYMER	HOMOPOLYMER
PHYSICAL			
SPECIFIC GRAVITY	D792	1.41	1.42
SPECIFIC GRAVITY in3/lb (cm3/g)	D792	19.7 (545)	19.5 (539)
WATER ABSORPTION, 24 h, 1/8-in thk (%)	D570	0.22	0.25
MECHANICAL			
TENSILE STRENGTH PSI (MPa)	D638		
At 73°F (23°C)		8,800 (61)	10,000 (69)
At 160°F (71°C)		5,000 (34)	6,900 (48)
ELONGATION*	D638	55	40
TENSILE MODULAS PSI (MPa)	D638	410000 (2828)	520000 (3587)
FLEXURAL SRENGTH PSI (MPa)	D790	13,000 (90)	14,100 (97)
FLEXURAL MODULUS PSI (MPa)	D790		
At 73°F (23°C)		375000 (2586)	410000 (2828)
At 160°F (71°C)		180000 (1241)	230000 (1586)
IMPACT STRENGTH, IZOD ft-lb/in (J/m)	D256		
NOTCHED		1.3 (70)	1.4 (76)
UNNOTCHED		20 (1080)	24 (1296)
FATIGUE ENDURANCE LIMIT, 107 CYCLES PSI (MPa)	D671	3,300 (22.7)	4,300 (29.8)
HARDNESS, ROCKWELL M	D785	80	94

*At 0.2 in/min loading rate

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PROPERTY	ASTM OR UL TEST	COPOLYMER	HOMOPOLYMER
THERMAL			
THERMAL CONDUCTIVITY	C177		
104 cal-cm/sec-cm ² -°C)		5.5	8.9
(Btu-in/hr-ft ² -°F)		1.6	2.6
COEFFICIENT OF THERMAL EXPANSION -40 to +185°C (105 in/in-°C)	D696	8.5	10.0
DEFLECTION TEMPERATURE °F (°C)	D648		
AT 264 PSI		205 (96)	277 (136)
AT 66 PSI		316 (157)	300 (149)
FLAMMABILITY RATING	UL94	HB	HB
ELECTRICAL			
DIELECTRIC STRENGTH SHORT TIME V/mil (KV/mm)	D149		
5 mils		2,100 (83)	3,000 (120)
20 mils		-	2,000 (79)
90 mils		500 (20)	500 (20)
DIELECTRIC CONSTANT	D150		
AT 1 kHz		3.7	3.7
AT 1 MHz		0.006	0.005
VOLUME RESISTIVITY (ohm-cm) AT 73F, 50% RH	D257	1014	1015
ARC RESISTANCE (s), 120 mils	D495	240 (burns)	220 (burns, no tracking)

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