

TYPICAL PROPERTY VALUES

	PROPERTIES	ASTM Test Method	Units	ULTEM®	ULTEM® 10% Glass Reinforced	ULTEM® 20% Glass Reinforced	ULTEM® 30% Glass Reinforced
PHYSICAL	Specific Gravity	D792	-	1.27	1.34	1.42	1.51
	Water Absorption, @24 hours, 73°F (23C)	D570	%	-	-	-	-
	@Equilibrium, 73°F (23C)			0.25	0.21	0.19	0.16
				1.25	1.20	1.10	0.90
MECHANICAL	Tensile Strength, Break, 73°F	D638	psi	15,200	16,600	20,100	24,500
	Tensile Modulus, 73°F	D638	psi	430,000	650,000	1,000,000	1,300,000
	Elongation, Break, 73°F	D638	%	60	6	3	13
	Elongation, Yield, 73°F	D638	%	7-8	5	N/A	N/A
	Flexural Strength, 73°F	D790	psi	22,000	28,000	30,000	33,000
	Flexural Modulus, 73°F	D790	psi	480,000	650,000	900,000	1,300,000
	Izod Impact Strength, Notched, 73°F	D256	ft-lbs/in	1.0	1.1	1.6	1.6
	Rockwell Hardness	D785	"M" Scale	109	114	114	114
	Compressive Strength	D695	psi	21,900	22,000	28,700	30,700
	Compressive Modulus	D695	psi	480,000	541,000	809,000	938,000
	Shear Strength, Ultimate	-	psi	15,000	13,000	13,500	14,000
THERMAL	Deflection Temperature	D648	°F	-	-	-	-
	@ 66 psi, 1/4"	-	-	410	410	410	414
	@264 psi, 1/4"	-	-	392	405	408	410
	Coefficient of Thermal Expansion	D696	in/in-°F	3.1 x 10 ⁻⁵	1.8 x 10 ⁻⁵	1.4 x 10 ⁻⁵	1.1 x 10 ⁻⁵
	Melting Point	-	°F	426	-	-	-
	Thermal Conductivity	D2214	BTU-in/hr-ft ² -°F	0.85	1.22	1.43	1.56
Flammability	UL94	-	V-0	V-0	V-0	V-0	
ELECTRICAL	Dielectric Strength, In Oil	D149	V/mil	710	700	670	630
	In Air	-	-	830	-	-	770
	Dielectric Constant,	D150	-	-	-	-	-
	1kHz, 50% RH	-	-	3.15	3.5	3.5	3.7
	Dissipation Factor	D150	-	-	-	-	-
	1kHz, 50% RH, 73°F (23°C)	-	-	0.0013	0.0014	0.0015	0.0015
Volume Resistivity, 1/16"	D257	ohm-cm	1.0 x 10 ¹⁷	1.0 x 10 ¹⁷	7.0 x 10 ¹⁶	3.0 x 10 ¹⁶	

This information is only to assist and advise you on current technical knowledge and is given without obligation or liability. All trade and patent rights should be observed. All rights reserved. Data obtained from extruded shapes material.

MATERIAL AVAILABILITY

Rods: Diameters: 1/4" to 8"
Length: 10'

Plates: 1/4" to 2" thickness inclusive are 2' x 4'
2 1/4" to 4" thickness inclusive are 1' x 4'

Primary Specification (Resin) (Typical)

ASTM-D-4066 PA0110L2A00000

Shapes Specification (Typical)

ASTM-D-5989 S-PA0121