

MATERIAL DATA SHEETS

PROPERTIES	UNITS	ASTM TEST METHOD	PVC	ISOPLAST POLYURETHANE 40% LONG GLASS FILLED	ULTEM 1000	ULTEM 2300 30% GLASS FILLED
Tensile strength at yield	psi Mpa	D-638	7450 51	27,000 190	15,200 105	24,500* 160*
Elongation at yield	%	D-638	NR	2	7-8	N.A.
Elongation at fail	%		40-80	2	60	3
Flexural Modulus at yield	10 ³ psi Mpa	D-790	400 2760	1500 10,000	480 3300	1300 9000
Isod impact strength notched	ft-lb/in joules/M	D-256	>5. >270	8 430	1 50	2.0 110
Deflection temp. at 66 psi	°F (°C)	D-648	NR	NR	410 (210)	412 (212)
at 264 psi	°F (°C)		170 (77)	210 (99)	392 (200)	410 (210)
Melting point	°F °C	D-789	193-246 75-105 T _g	366 (Vicat) 186	338 (Vicat) 170	356 (Vicat) 180
Dielectric strength	V/mil	D-149	1413	500	830	770
Volume resistivity	ohm-cm	D-257	1.2 x 10E+12	NR	6.7 x 10E+17	3.0 x 10E+16
Water absorption	%/24hr.	D-570	0.05	0.14	0.25	0.16
UL flammability	---	UL 94	94 V-0	94 HB	94 V-0	94 V-0
Rockwell Hardness	---	R, M scales	R115	R119	M109	M114
Flexural strength	10 ³ psi Mpa	D-638	14.45 99.63	40 275	22 150	33 230
Thermal conductivity	Btu-in/hr-ft ² -°F W/m-°C	---	.96 .14	NR NR	1.5 .22	1.6 2.3
Specific Gravity	---	D-792	1.37	1.5	1.27	1.51
Max. service temperature	°F °C	---	140 60	197 92	338 170	342 172

NR: Not Reported

PLEASE NOTE: To the best of our knowledge, the information contained in this guide is accurate, is based upon accepted technical practices and is believed to be reliable. Final determination of suitability of any process or material is the sole responsibility of the user. Product Components Corp. does not assume any liability for the accuracy or completeness of this information.