

## MATERIAL DATA SHEETS

PROPERTIES	UNITS	ASTM TEST METHOD	NYLON 6/6 (MOLDED)	NYLON 6/6 30% GLASS-FILLED	POLYETHYLENE	POLYPROPYLENE
Tensile strength at yield	psi Mpa	D-638	9000 62	25,000 172	5800 40	4000 28
Elongation at yield at fail	% %	D-638	20 200	5-10 40	NR 600	18 150
Flexural Modulus at yield	10 <sup>3</sup> psi Mpa	D-790	190 1310	800-900 5516-6206	NR	150 1030
Isod impact strength notched	ft-lb/in joules/M	D-256	3.0 160	2 107	NR	2.0 107
Deflection temp. at 66 psi at 264 psi	°F (°C) °F (°C)	D-648	430 160 (71)	500 (260) 485-490 (251-255)	NR	194 (90) 150 (65)
Melting point	°F °C	D-789	482 250	500-509- 260-265 T <sub>m</sub>	NR	340 171
Dielectric strength	V/mil	D-149	550	500	500-900	650
Volume resistivity	ohm-cm	D-257	2 x 10E+13	1 x 10E+15	1 x 10E+16	1 x 10E+17
Water absorption	%/24hr.	D-570	1.1	0.9	NR	0.01
UL flammability	---	UL 94	94 V-2	94 HB	NR	94 HB
Rockwell Hardness	---	R, M scales	R105	M96	NR	R85
Flexural strength	10 <sup>3</sup> psi Mpa	D-638	17.9 123	36-38 255	NR	7000 48
Thermal conductivity	Btu-in/hr-ft <sup>2</sup> -°F W/m-°C	---	1.7 .25	1.4-1.5 .20-.22	2.9-3.5 .42-50	.81 .12
Specific Gravity	---	D-792	1.16	1.37-1.39	1.09	.09
Max. service temperature	°F °C	---	221 105	230-240 110-116	212 100	212 100

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.