



# CROWN RUBBER WORKS

TOTAL SEALING SOLUTIONS

PROPERTY	UNITS	TEST METHOD	PA 6	PA 6M MoS2	PA XLU Oilon	UHMW	POLY ACETAL	PP	PTFE
Specific Gravity	-	ASTM D792	1.16	1.17	1.15	0.935	1.4	0.9	2.2
Tensile Strength	psi	ASTM D638	12000 – 13000	12000 – 13500	9500 – 11000	3100	9500	4800	3900
Tensile Elongation	%	ASTM D638	20 - 45	20 – 45	45 – 55	_	30	12	300
Tensile Modulus	psi	ASTM D638	485000-550000	485000-55000	485000-550000	125000	400000	195000	80000
Compressive Strength (@ 10% Offset)	psi	ASTM D695	15500 – 18000	15500 – 18000	12000 – 14000	2000	15000	7000	3500
Compressive Modulus	psi	ASTM D695	300000-350000	300000-350000	275000-375000	_____	400000	_____	70000
Flexural Strength	psi	ASTM D790	15500 – 17500	15500 – 17500	14000 – 16000	_____	12000	7000	No Break
Flexural Modulus	psi	ASTM D790	420000-500000	420000-500000	375000-475000	125000	400000	180000	72000
Shear Strength	psi	ASTM D732	10000 – 11000	10000 - 11000	8000 – 9000	_____	_____	_____	_____
Hardness- Shore 'D'	D	ASTM D2240	80 – 85	82 – 85	78 – 83	62 – 66	88 – 93	60 – 65	50
Melting Point	Deg C	ASTM D789	230	240	220	-----	168	164	335
Coefficient of Linear Thermal Expansion	in./in./Deg F	ASTM D696	5.0 x 10 <sup>-5</sup>	5.0 x 10 <sup>-5</sup>	3.5 x 10 <sup>-5</sup>	11.1 x 10 <sup>-5</sup>	5.4 x 10 <sup>-5</sup>	6.2 x 10 <sup>-5</sup>	7.5 x 10 <sup>-5</sup>
Deformation under Load	%	ASTM D621	0.5 – 2.5	0.5 – 2.5	0.5 – 3.0	_____	_____	_____	_____
Deflection Temp. 264 psi	Deg C Deg C	ASTM D648	149-218 204-	149-218 204-	149-218 204-	---- 95	104 -----	52 -----	55 -----
66 psi			218	218	218				
Continuous Service Temp. in Air	Deg C	-	120	130	110	82	82	75	220
Intermittent Service Temp.	Deg C	-	160	170	160	----	-----	82	260
Dielectric Constant @ 60 Cycles @ 1000 Cycles @ 100000 Cycles	----- ----- -----	ASTM D150	3.7 3.7 3.7	3.7 3.7 3.7	_____ _____ _____	2.3 _____ -----	----- 3.8 _____	----- 2.25 _____	----- 2.1 _____
Tensile Impact	ft. lbs./in2	ASTM D1822	_____	_____	33 - 36	_____	_____	_____	_____
Coefficient of friction Static Dynamic	_____ -	_____	_____	_____	0.19-0.22	0.11-0.12	_____	_____	_____