

## OPTIX Polymer MS-983 Polymers

### Typical Properties

Mechanical	TEST METHOD	UNITS	MS-983
Tensile Strength	ASTM D638	psi	10,300
Elongation	ASTM D638	%	4.2
Modulus of Elasticity	ASTM D638	psi	490000
Flexural Strength	ASTM D790	psi	17000
Flexural Modulus	ASTM D790	psi	490000
Impact Strength – Izod (Notched)	ASTM D256	ft-lb/in	>0.2
Impact Strength – Falling Weight (1/8")	ASTM D5420 GB	in-lb	3
Rockwell Hardness	ASTM D785	M scale	95

Thermal	TEST METHOD	UNITS	MS-983
Vicat Softening Temperature	ASTM D1525	°F	215
Heat Deflection Temperature Under Load (264 psi)	ASTM D648	°F	203
Melt Flow Rate	ASTM D1238	g/10 min	1.8
Coefficient of Linear Thermal Expansion (-30 to 30°C)	ASTM D696	mm/(mm-oC)	6 X 10 <sup>-5</sup>
Molding Shrinkage	ASTM D955	%	0.2-0.6

Optical	TEST METHOD	UNITS	MS-983
Luminous Transmittance	ASTM D1003	%	92
Haze	ASTM D1003	%	<2
Refractive Index	ASTM D542	-	1.49

Other	TEST METHOD	UNITS	MS-983
Specific Gravity	ASTM D792	-	1.19
Flammability	UL 94	-	HB
Relative Thermal Index	UL 746 ABC	°C	90
3-Year Weathering	SAE J576 (AMECA)	-	Listed
Water Absorption	ASTM D570	%	0.4

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use are beyond our control. We recommend that the prospective user determine the suitability of our materials and suggestions before adopting them on a commercial scale.

Questions? Please contact Plaskolite Customer Support 800-848-9124