



DIAMOND POLYMERS, INC.

ASA Weatherable Polymers
Injection Molding Grade

ASA S510

Medium Impact

PROPERTIES	ASTM METHOD	UNITS ENGLISH METRIC	
PHYSICAL			
Melt Flow Rate - Procedure A Condition G (200° C/5.0 kg) Condition I (230° C/3.8 kg)	D-1238	g/10 min g/10 min	1.5 3.7
Specific Gravity	D-792		1.06
Mold Shrinkage	D-955	in/in cm/cm	0.003-0.007 0.003-0.007
Rockwell Hardness	D-785	R scale	95
IMPACT			
Izod Impact, notched 0.125" bar, 23° C (73° F)	D-256	ft-lb/in J/m	3.9 208
FLEXURAL			
Flexural Modulus, tangent chs 0.05 in/min	D-790	psi MPa	330,000 2,273
TENSILE			
Tensile Yield Strength, chs 2 in/min	D-638	psi MPa	6,400 44.1
THERMAL			
Heat Deflection Temperature 0.125" bar @ 264 psi Unannealed/Conditioned 48 hours @ 23° C (73° F)	D-648	°F °C	181 83
Annealed 4 hours @ 80° C (176° F)		°F °C	--- ---
Vicat Softening Point, 0.125", 1 Kg	D-1525	°F °C	198 92

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