



DIAMOND POLYMERS, INC.

ASA Weatherable Polymers
Injection Molding Grade

ASA S170
High Impact

PROPERTIES	ASTM METHOD	UNITS ENGLISH METRIC	
PHYSICAL			
Melt Flow Rate - Procedure A 220°C/10 kg)	D-1238	g/10 min	15.0 - 20.0
Specific Gravity	D-792		1.07
Mold Shrinkage	D-955	in/in cm/cm	0.004-0.008 0.004-0.008
Rockwell Hardness	D-785	R scale	93
IMPACT			
Izod Impact, notched 0.125" bar, 23° C (73° F)	D-256	ft-lb/in J/m	6.0 320.4
FLEXURAL			
Flexural Modulus, tangent chs 0.05 in/min	D-790	psi MPa	300,000 2,067
TENSILE			
Tensile Yield Strength, chs 2 in/min	D-638	psi MPa	5,800 40.0
THERMAL			
Heat Deflection Temperature 0.125" bar @ 264 psi Unannealed/Conditioned 48 hours @ 23° C (73° F)	D-648	°F °C	176 80
Annealed 4 hours @ 80° C (176° F)		°F °C	201 94
Vicat Softening Point 0.125" bar/wt 1000g	D-1525	°F °C	192 89

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