



**DIAMOND POLYMERS, INC.**

Extrusion Grade

Environmental Stress Crack Resistant

**ABS 3501 E**

Natural 1002 ESCR

PROPERTIES	ASTM METHOD	UNITS ENGLISH METRIC	
<b>PHYSICAL</b>			
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	0.7 2.5
Specific Gravity	D-792		1.05
Mold Shrinkage	D-955	in/in cm/cm	0.004-0.006 0.004-0.006
Rockwell Hardness	D-785	R scale	108
<b>IMPACT</b>			
Izod Impact, notched 0.125", 23° C (73° F)	D-256	ft-lb/in J/m	5.0 267
<b>FLEXURAL</b>			
Flexural Modulus, tangent, chs 0.05 in/min	D-790	psi MPa	340,000 2,345
<b>TENSILE</b>			
Tensile Yield Strength, chs 2 in/min	D-638	psi MPa	6,500 44.8
<b>THERMAL</b>			
Heat Deflection Temperature 0.125" bar @ 1.8 Mpa (264 psi) Unannealed/Conditioned 48 hours @ 23° C (73° F)	D-648	°F °C	171 77
Annealed 4 hours @ 80° C (176° F)		°F °C	201 94
Vicat Softening Point, 0.125", 1Kg	D-1525	°F °C	219 104
<b>FLAMMABILITY RATING</b>			
Minimum Thickness 1.5mm / 0.0625in / 1/16" 2.5mm / 0.100in / 3/32" 3.0mm / 0.125in / 1/8"	UL 94 UL 94 UL 94		HB
U.L. File Number			E119088

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