



DIAMOND POLYMERS, INC.

Extrusion Grade

**ABS 3501 E**  
**NATURAL 1050**  
**HIGH IMPACT**

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	1.0
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	6.0 320
<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

**FDA STATUS: ABS 3501 Natural 1050 meets the requirements of FDA regulation 21 CFR 177.1050 and 178.2010.**  
The information contained herein is provided for general reference purposes only. Diamond Polymers Inc. makes no guarantee or warranty and does not assume liability with respect to the accuracy or completeness of the information presented, or the product results in any specific instance and hereby expressly disclaims any implied warranties of suitability or fitness for a particular purpose or any other warranties or representations whatsoever expressed or implied. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of patent.