DIAMOND POLYMERS, INC.

Extrusion Grade

ABS 3501 E

NATURAL 1050

HIGH IMPACT

PROPERTIES	ASTM METHOD	UNITS ENGLISH METRIC	
PHYSICAL			
Melt Flow Rate - Procedure A	D-1238		
Condition G (200° C/5.0 kg)		g/10 min	1.0
Condition I (230° C/3.8 kg)		g/10 min	
Specific Gravity	D-792		1.05
Mold Shrinkage	D-955	in/in	0.004-0.006
		cm/cm	0.004-0.006
Rockwell Hardness	D-785	R scale	108
IMPACT			
Izod Impact, notched	D-256	ft-lb/in	6.0
0.125", 23° C (73° F)		J/m	320
FLEXURAL			
Flexural Modulus, tangent,	D-790	psi	340,000
chs 0.05 in/min		MPa	2,345
TENSILE			
Tensile Yield Strength,	D-638	psi	6,500
chs 2 in/min		MPa	44.8
THERMAL			
Heat Deflection Temperature	D-648		
0.125" bar @ 1.8 Mpa (264 psi)			
Unannealed/Conditioned		°F	171
48 hours @ 23° C (73° F)		°C	77
Annealed		°F	201
4 hours @ 80° C (176° F)		°C	94
Vicat Softening Point, 0.125", 1Kg	D-1525	°F	219
		°C	104
FLAMMABILITY RATING			
Minimum Thickness			
1.5mm / 0.0625in / 1/16"	UL 94		HB
2.5mm / 0.100in / 3/32"	UL 94		
3.0mm / 0.125in / 1/8"	UL 94		
U.L. File Number			E119088

FDA STATUS: ABS 3501 Natural 1050 meets the requirements of FDA regulation 21 CFR 177.1050 and 178.2010

EAP/9-04-04