

MATERIAL SPECIFICATIONS ABS 94 HB:

UL FILE #: E56070

PROPERTY	METHOD	UNIT	ABS 94HB
PHYSICAL			
Melt Flow Index: 200°C x 5 kg (cond. G)	ASTM D1238	g/10 min	4.5
230°C x 3.8 kg (cond. I)	ASTM D1238	g/10 min	14
220°C x 10 kg	ISO 1133	g/10 min	50
Specific Gravity	ASTM D792	-----	1.05
Mold Shrinkage (Flow, 1/8 in)	ASTM D955	in/in x 10 ⁻³	3-7
MECHANICAL @73°C			
Izod Impact Strength (Notched) 1/8"	ASTM D256	ft • lb/in (J/m)	3.2 (171)
Izod Impact Strength (Notched) 1/4"	ASTM D256	ft • lb/in (J/m)	2.8 (149)
Tensile Strength at Yield	ASTM D638	psi Mpa	6500 45
Tensile Modulus (6mm/min)	ASTM D638	psi Mpa	405000 2792
Elongation at Break	ASTM D638	%	20
Flexural Modulus	ASTM D790	psi Mpa	370000 2551
Flexural Strength at Yield	ASTM D790	psi Mpa	10800 74
Hardness (Rockwell, R-Scale)	ASTM D785	-----	115
THERMAL			
Heat Deflection Temp. (1/4" Test Specimens)	ASTM D648		
264 psi (1.82 Mpa) Unannealed		°F(°C)	192 (89)
264 psi (1.82 Mpa) Annealed φ		°F(°C)	210 (99)
66 psi (0.46 Mpa) Unannealed		°F(°C)	210 (99)
Vicat Softening Temp (1kg, 50°C/hr)	ASTM D1525	°F(°C)	221 (105)
Coefficient of Thermal Expansion	ASTM D696	in/in/°F x 10 ⁻⁵ mm/mm/°F x 10 ⁻⁵	5.4 9.8
(-40°C → 80°C, Annealed)			
ELECTRICAL @73°F			
Volume Resistivity	ASTM D257	ohm-cm	> 10 ¹⁵
FLAME CLASS RATING			
UL 94HB (Min. Tested Thickness)	UL94	in (mm)	0.062 (1.57)