

HI-121H (High Impact Grade)

Application

Vacuum cleaners, mixer

Feature

LG high impact ABS HI-121H provides a wide range of selection from those ultra-high impact strength to general impact strength depending upon requirements of our customers.

Properties	Test Method	Test Condition	Unit	Value
Physical				
Specific Gravity	ASTM D792		g/cc	1.04
Molding Shrinkage	ASTM D955		%	0.4~0.7
Melt Flow Index	ASTM D1238(G)	200℃/ 5kg	g/10min	2
	–	220℃/ 10kg	g/10min	21
	ASTM D1238(I)	230℃/ 3.8kg	g/10min	6
Mechanical				
Tensile Strength at yield	ASTM D638	50mm/min	kg/cm ²	540
			lb/in ²	7,600
Tensile Modulus	ASTM D638	1mm/min	kg/cm ²	22,600
			lb/in ²	
Elongation at yield	ASTM D638	50mm/min	%	6
Elongation at break	ASTM D638	50mm/min	%	30
Flexural Strength at yield	ASTM D790	15mm/min	kg/cm ²	800
			lb/in ²	11,450
Flexural Modules	ASTM D790	15mm/min	kg/cm ²	26,200
			lb/in ²	381,000
Izod Impact Strength (Noched)	ASTM D256	1/4" , '23℃	kg·cm/cm	21
		1/4" , '-30℃	kg·cm/cm	7
		1/8" , '23℃	kg·cm/cm	22
		1/8" , '-30℃	kg·cm/cm	8
Rockwell Hardness	ASTM D785	R-Scale	–	111
Thermal				
Heat Deflection Temp	ASTM D648	18.5kg/cm ² , 1/4" (annealed)	℃	92
			°F	198
		18.5kg/cm ² , 1/4" (unannealed)	℃	87
			°F	189
		4.6kg/cm ² , 1/4" (annealed)	℃	93
			°F	199
4.6kg/cm ² , 1/4" (unannealed)	℃	90		
	°F	194		
Vicat Softening Temp	ASTM D1525	5kg, 50℃/h	℃	94
			°F	201
Flammability	UL94	1/8"	class	HB
		1/10"	class	
		1/16"	class	HB
	IEC707	1/8"	mm/min	FH3-34
		1/16"	mm/min	