

# 60HRI (HIPS)

## Application

TV,TV sets,Tape recorders,vacuum cleaner,washing machine,air conditioner

## Feature

HIPS is made by dissolving the rubber in a styrene monomer and then polymerizing the styrene in the usual way.HIPS retains some rubber content to increase impact strength.In addition,high heat resistance and fluidity allow the products various processing methods.This products meet the standards of foods and health from FDA in America ,thus the products guarantee non- toxicity for food packing materials and toys.

Properties	Test Method	Test Condition	Unit	Value
<b>Physical</b>				
Specific Gravity	ASTM D792		g/cc	1.03
Molding Shrinkage	ASTM D955		%	
Melt Flow Index	ASTM D1238(G)	200 / 5kg	g/10min	6
	-	220 / 10kg	g/10min	65
	ASTM D1238(l)	230 / 3.8kg	g/10min	15
<b>Mechanical</b>				
Tensile Strength at yield	ASTM D638	50mm/min	kg/cm <sup>2</sup>	270
			lb/in <sup>2</sup>	3,900
Tensile Modulus	ASTM D638	1mm/min	kg/cm <sup>2</sup>	18,200
			lb/in <sup>2</sup>	
Elongation at yield	ASTM D638	50mm/min	%	5
Elongation at break	ASTM D638	50mm/min	%	62
Flexural Strength at yield	ASTM D790	15mm/min	kg/cm <sup>2</sup>	430
			lb/in <sup>2</sup>	6,200
Flexural Modules	ASTM D790	15mm/min	kg/cm <sup>2</sup>	21,700
			lb/in <sup>2</sup>	309,000
Izod Impact Strength (Noched)	ASTM D256	1/4" , '23	kg·cm/cm	9
		1/4" , '- 30	kg·cm/cm	5
		1/8" , '23	kg·cm/cm	13
		1/8" , '- 30	kg·cm/cm	6
Rockwell Hardness	ASTM D785	R- Scale	-	99
<b>Thermal</b>				
Heat Deflection Temp	ASTM D648	18.5kg/cm <sup>2</sup> , 1/4" (annealed)		80
				177
		18.5kg/cm <sup>2</sup> , 1/4" (unannealed)		82
				179
		4.6kg/cm <sup>2</sup> , 1/4" (annealed)		95
				203
4.6kg/cm <sup>2</sup> , 1/4" (unannealed)		91		
		195		
Vicat Softening Temp	ASTM D1525	5kg, 50 /h		90
				195
Flammability	UL94	1/8"	class	HB
		1/10"	class	
		1/16"	class	HB
	IEC707	1/8"	mm/min	FH3-28
		1/16"	mm/min	