

ABS XG570

Injection Molding

Description

Anti-Scratch, High Impact, High Flow

Application

LCD TV Stand Base, Audio/Video Housing

Properties	Test Condition	Test Method	Unit	Typical Value
Physical				
Specific Gravity		ASTM D792	-	1.06
Molding Shrinkage (Flow), 3.2mm		ASTM D955	%	0.4 ~ 0.6
Melt Flow Rate	220 °C/10kg	ASTM D1238	g/10min	22
Water Absorption	23 °C, 24hrs	ASTM D570	%	0.3
Mechanical				
Tensile Strength, 3.2mm		ASTM D638		
@ Yield	50mm/min		kg/cm ²	500
Tensile Elongation, 3.2mm		ASTM D638		
@ Yield	50mm/min		%	>6
@ Break	50mm/min		%	30
Tensile Modulus, 3.2mm	1mm/min	ASTM D638	kg/cm ²	
Flexural Strength, 6.4mm	15mm/min	ASTM D790	kg/cm ²	840
Flexural Modulus, 6.4mm	15mm/min	ASTM D790	kg/cm ²	29,500
Tear Strength @ Break	50mm/min	ASTM D624	kg/cm	
IZOD Impact Strength, 6.4mm		ASTM D256		
(Notched)	23 °C		kg·cm/cm	18
	-30 °C		kg·cm/cm	10
IZOD Impact Strength, 3.2mm		ASTM D256		
(Notched)	23 °C		kg·cm/cm	18
	-30 °C		kg·cm/cm	10
Rockwell Hardness	R-Scale	ASTM D785	-	115
Thermal				
Heat Deflection Temperature, 6.4mm		ASTM D648		
(Unannealed)	18.6kg		°C	87
	4.6kg		°C	91
Heat Deflection Temperature, 3.2mm		ASTM D648		
(Unannealed)	18.6kg		°C	87
	4.6kg		°C	91
Flammability		UL94		
1.6mm			class	HB
3.2mm			class	HB
Others				
Ozone Resistance	5sec	JIS K6301	-	-

Note) Typical values are only for material selection purpose, and variation within normal tolerances are for various colors.

Values given should not be interpreted as specification and not be used for part or tool design.

All properties, except melt flow rate are measured on injection molded specimens and after 48 hours storage at 23°C, 50% relative humidity.

Updated : 9-Nov-09

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Processing Guide (Injection Molding)

Processing Parameters	Unit	Value	
Drying Temperature	°C	80 ~ 90	
Drying Time	hrs	3 ~ 4	
Minimum Moisture Content	%	0.01	
Melt Temperature	°C	200 ~ 220	
Cylinder Temperature	Rear	°C	170 ~ 190
	Middle	°C	180 ~ 200
	Front	°C	190 ~ 210
Nozzle Temperature	°C	200 ~ 220	
Mold Temperature	°C	40 ~ 60	
Back Pressure	kg/cm ²	300 ~ 600	
Screw Speed	rpm	30 ~ 60	

Note) Back Pressure & Screw Speed are only mentioned as general guidelines.

These may not apply or need adjustment in specific situations such as low shot sizes, thin wall molding and gas-assist molding.

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