

XR-404 (Heat Resistance Grade)

Application

Automotive Interior(Console Box, Power Window S/W Housing, Center Facia)

Feature

LG heat resistance ABS XR-404 shows high heat resistance as well as physical properties such as impact strength,rigidity,and processability. It is most suitable for electric and electronic components and automotive parts that require heat resistance.

Properties	Test Method	Test Condition	Unit	Value
Physical				
Specific Gravity	ASTM D792		g/cc	1.05
Molding Shrinkage	ASTM D955		%	0.4~0.7
Melt Flow Index	ASTM D1238(G)	200℃/ 5kg	g/10min	1
	–	220℃/ 10kg	g/10min	7
	ASTM D1238(I)	230℃/ 3.8kg	g/10min	3
Mechanical				
Tensile Strength at yield	ASTM D638	50mm/min	kg/cm ²	480
			lb/in ²	6,800
Tensile Modulus	ASTM D638	1mm/min	kg/cm ²	22,100
			lb/in ²	
Elongation at yield	ASTM D638	50mm/min	%	6
Elongation at break	ASTM D638	50mm/min	%	20
Flexural Strength at yield	ASTM D790	15mm/min	kg/cm ²	780
			lb/in ²	11,000
Flexural Modules	ASTM D790	15mm/min	kg/cm ²	24,000
			lb/in ²	341,000
Izod Impact Strength (Noched)	ASTM D256	1/4" , '23℃	kg·cm/cm	18
		1/4" , '-30℃	kg·cm/cm	6
		1/8" , '23℃	kg·cm/cm	20
		1/8" , '-30℃	kg·cm/cm	6
Rockwell Hardness	ASTM D785	R-Scale	–	110
Thermal				
Heat Deflection Temp	ASTM D648	18.5kg/cm ² , 1/4" (annealed)	℃	106
			°F	223
		18.5kg/cm ² , 1/4" (unannealed)	℃	100
			°F	212
		4.6kg/cm ² , 1/4" (annealed)	℃	112
			°F	234
4.6kg/cm ² , 1/4" (unannealed)	℃	108		
	°F	226		
Vicat Softening Temp	ASTM D1525	5kg, 50℃/h	℃	107
			°F	225
Flammability	UL94	1/8"	class	HB
		1/10"	class	
		1/16"	class	HB
	IEC707	1/8"	mm/min	FH3-34
		1/16"	mm/min	