SolutionPartner

LG Chem

ABS XR418

Injection Molding Grade

Description

High Heat, Low emission

Application

Automotives Interior parts

Properties	Test Condition	Test Method	Unit	Typical Value
Physical				
Density		ISO 1183	g/cm^3	1.06
Molding Shrinkage (Flow), 3.2mm		ISO 294-4	%	0.4~0.7
Melt Flow Rate	220℃/10kg	ISO 1133	g/10min	6.0
Mechanical				
Tensile Strength		ISO 527		
@ Yield	50mm/min		MPa	48
Tensile Modulus	1mm/min	ISO 527	MPa	2,550
Flexural Strength	2mm/min	ISO 178	MPa	76
Flexural Modulus	2mm/min	ISO 178	MPa	2,650
IZOD Impact Strength, 80*10*4mm		ISO 180/1A		
(Notched)	23℃		kJ/m^2	14.0
	-30℃		kJ/m^2	-
Charpy Impact Strength, 80*10*4mm		ISO179/1eA		
(Notched)	23℃		kJ/m^2	13.0
	-30℃		kJ/m^2	-
Rockwell Hardness		ISO 2039	-	113
Thermal				
Heat Deflection Temp. 120*10*4mm				
(unannealed)	1.8MPa	ISO 75/Be	℃	90
	0.45MPa	ISO 75/Ae	℃	107
Vicat Softening Temperature		ISO 306		
	50N, 50℃/h		℃	108
CLTE, 23℃ to 60℃		ISO 11359-2		
Flow			10^{-5} m/m℃	8.0~9.0
Cross-flow			10^{-5} m/m℃	8.0~9.0
Flammability		UL94		
Relative Temperature Index		UL 746B		
Electrical			℃	
Mechanical with Impact			℃	
Mechanical without Impact			℃	
Electrical				
Comparative Tracking Index(CTI)	Solution A	IEC 60112	Volts	
Surface Resistivity		IEC 60093	Ohm	
Volume Resistivity	23℃	IEC 60093	Ohm·m	
Electric Strength, 1mm	23℃	IEC 60243-1	kV/mm	

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 molulded specimens and after 48 hours storage at 23℃, 50% relative humidty.

Updated : 25-Apr-16

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Processing Guide (Injection Molding)

Processing Parameters		Unit	Value
Drying Temperature		℃	80 ~ 90
Drying Time		hrs	3 ~ 4
Recommendable Moisture Content		%	0.05 below
Melt Temperature		℃	230 ~ 270
Cylinder Temperature	Rear	℃	180 ~ 210
	Middle	℃	210 ~ 230
	Front	℃	230 ~ 240
Nozzle Temperature		℃	230 ~ 240
Mold Temperature		℃	40 ~ 60
Back Pressure		kg/cm^2	10 ~ 30
Measuring Speed		rpm	Low speed

Note) Back Pressure & Measuring 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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