WeConnectScience

LG Chem

XR409H

Description

XR409H has well-balanced properties with extremly high heat (VST≥116oC), targeted for injection molding

Key Features

Standard Purpose, Ultra High Heat Resistance, Non Painting

Application

Cockpit,Door Trim,Fire Alarm,Hair Dryer,Microwave Oven,Others,Rear Combination Lamp,Set-Top Box,Tractor,Wireless Router

Properties	Condition	Method	Unit	XR409H
Physical				
Specific Gravity	23℃	ISO 1183		1.06
Mold Shrinkage	23℃, 3.2mm	ISO 294-4	%	0.4 ~ 0.7
Melt Flow Rate	220℃, 10kg	ISO 1133	g/10min	3
Mechanical				
Tensile Strength at Yield	23℃, 50mm/min, 4mm	ISO 527	MPa	49
Tensile Elongation at Break	23℃, 50mm/min, 4mm	ISO 527	%, (Min)	15
Flexural Strength	23℃, 2mm/min, 4mm	ISO 178	MPa	80
Flexural Modulus	23℃, 2mm/min, 4mm	ISO 178	MPa	2600
Izod Impact Strength	Notched, 4mm, 23℃	ISO 180/1A	kJ/m²	15
Izod Impact Strength	Notched, 4mm, -30℃	ISO 180/1A	kJ/m²	8
Charpy Impact Strength	Notched, 4mm, 23℃	ISO 179/1eA	kJ/m²	14
Charpy Impact Strength	Notched, 4mm, -30℃	ISO 179/1eA	kJ/m²	8
Rockwell Hardness	R-Scale	ISO 2039		113
Thermal				
Heat Deflection Temperature	Flatwise, 1.8MPa, 4mm, Unannealed	ISO 75	℃	100
Heat Deflection Temperature	Flatwise, 0.45MPa, 4mm, Unannealed	ISO 75	℃	106
Heat Deflection Temperature	Flatwise, 1.8MPa, 4mm, Annealed	ISO 75	℃	107
Heat Deflection Temperature	Flatwise, 0.45MPa, 4mm, Annealed	ISO 75	℃	111
Vicat Softening Temperature	50N, 50℃/h	ISO 306	℃	117

Note

Typical values can be used only for the purpose of selecting material, and there can be variation within normal tolerances for various colors.
Values given should not be interpreted as specification and not be used for designing part or tool.
All properties, except melt flow index are measured by injection molded specimens after 48 hours storage at 23℃, 50% relative humidity.

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Processing Guide (Injection Molding)

Processing Parameters	Unit	Value
Drying Temperature	℃	80 ~ 90
Drying Time	hrs	3 ~ 4
Injection Temperature	℃	230 ~ 270
Mold Temperature	℃	40 ~ 80
Screw Speed	rpm	30 ~ 60

Note

Injection Temperature & 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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