PMMA
Heat Resistant Grade

IH830HR

Description

Appropriate for injection molding
The highest heat resistance grades
Excellent weatherability (AMECA listed)
Free colorability
Mold flow simulation data is available

Application

Windows for electric home appliances, Food containers
Inner lense and reflex plates (only colored parts), Rear combination lamp

Table

PROPERTY	CONDITION	UNIT	METHOD	VALUE
OPTICAL PROPERTIES				
Refractive Index	nd	-	ISO 489	1.49
Light Transmittance	3mm	%	ISO 13468-1	92
Haze	3mm	%	ISO 14782	<0.5
THERMAL PROPERTIES				
Melt Flow Index	230℃/3.8kg	g/10min	ISO 1133	1.7
VICAT Softening Point	B/50	℃	ISO 306	115
Heat Deflection Temperature	1.8MPa	℃	ISO 75	105
Coefficient of Linear Expansion	-	1/℃	ASTM D696	$6X10^{-5}$
MECHANICAL PROPERTIES				
Charpy Impact Strength	notched	kJ/m2	ISO 179	1.5
Rockwell Hardness	M scale	-	ISO 2039-2	99
Tensile Strength at Break	5mm/min	MPa	ISO 527	73
Tensile Strain at Break	5mm/min	%	ISO 527	5.3
Tensile Modulus	1mm/min	GPa	ISO 527	3.0
Flexural Strength	2mm/min	MPa	ISO 178	120
Flexural Modulus	2mm/min	GPa	ISO 178	3.2
GENERAL PROPERTIES				
Density	-	g/㎤	ISO 1183	1.19
Mold Shrinkage	-	%	ASTM D955	0.2-0.6
Water Absorption	24hr	%	ASTM D570	0.3
Flammability UL94	1.5mm	Class	IEC 60695-11-10	HB
RECOMMENDED PROCESSING CONDITIONS				
Predrying Temperature	-	℃	-	90-100
Predrying Time in Desiccant-Type Drier	-	hr	-	4-6
Melt Temperature	-	℃	-	230-260
Mold Temperature	-	℃	-	60-90

REMARKS : The listed values should be used for reference purpose only.

LX MMA