

# PMMA Heat Resistant Grade IH830HT

## 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
<b>OPTICAL PROPERTIES</b>				
Refractive Index	nd	-	ISO 489	1.49
Light Transmittance	3mm	%	ISO 13468-1	92
Haze	3mm	%	ISO 14782	<0.5
<b>THERMAL PROPERTIES</b>				
Melt Flow Index	230°C/3.8kg	g/10min	ISO 1133	1.7
VICAT Softening Point	B/50	°C	ISO 306	115
Heat Deflection Temperature	1.8MPa	°C	ISO 75	104
Coefficient of Linear Expansion	-	1/°C	ASTM D696	6X10 <sup>-5</sup>
<b>MECHANICAL PROPERTIES</b>				
Charpy Impact Strength	notched	kJ/m <sup>2</sup>	ISO 179	1.5
Rockwell Hardness	M scale	-	ISO 2039-2	99
Tensile Strength at Break	5mm/min	MPa	ISO 527	70
Tensile Strain at Break	5mm/min	%	ISO 527	4.5
Tensile Modulus	1mm/min	GPa	ISO 527	3.2
Flexural Strength	2mm/min	MPa	ISO 178	118
Flexural Modulus	2mm/min	GPa	ISO 178	3.1
<b>GENERAL PROPERTIES</b>				
Density	-	g/cm <sup>3</sup>	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
<b>RECOMMENDED PROCESSING CONDITIONS</b>				
Predrying Temperature	-	°C	-	90-100
Predrying Time in Desiccant-Type Drier	-	hr	-	4-6
Melt Temperature	-	°C	-	230-260
Mold Temperature	-	°C	-	60-90

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