

PMMA
Injection Grade

IH830U15

Description

High UV protection
Good for exterior application
High light transmission
Good mechanical strength, surface hardness, weather resistance

Application

Windows for electric home appliances, UV-Blocking sheet/Film, Mobile back cover
Road Traffic sign, Multi-wall sheet, Corrugated sheet

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°C/3.8kg	g/10min	ISO 1133	2.6
VICAT Softening Point	B/50	°C	ISO 306	105
Heat Deflection Temperature _{annealed}	1.8MPa	°C	ISO 75	101
Coefficient of Linear Expansion	-	1/°C	ASTM D696	6X10 ⁻⁵
MECHANICAL PROPERTIES				
Charpy Impact Strength	notched	kJ/m ²	ISO 179	1.5
Rockwell Hardness	M scale	-	ISO 2093-2	96
Tensile Strength at Break	5mm/min	MPa	ISO 527	71
Tensile Strain at Break	5mm/min	%	ISO 527	7
Tensile Modulus	1mm/min	GPa	ISO 527	3.4
Flexural Strength	2mm/min	MPa	ISO 178	122
Flexural Modulus	2mm/min	GPa	ISO 178	3.2
GENERAL PROPERTIES				
Density	-	g/cm ³	ISO 1183	1.19
Mold Shrinkage	-	%	ASTM D955	0.2-0.6
Water Absorption	24hr	%	ASTM 570	0.3
Flammability UL94	1.5mm	Class	IEC 60695-11-10	HB
RECOMMENDED PROCESSING CONDITIONS				
Predrying Temperature	-	°C	-	80-90
Predrying Time in Desiccant-Type Drier	-	hr	-	4-6
Melt Temperature	-	°C	-	220-250
Mold Temperature	-	°C	-	50-70

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