

# PMMA Impact Resistant Grade HI855HU

## Description

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

## Application

Home appliance cover housing & front door, UV-Blocking sheet/Film  
Road Traffic sign, Multi-wall sheet, Corrugated sheet

## 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	<1.5
<b>THERMAL PROPERTIES</b>				
Melt Flow Index	230°C/3.8kg	g/10min	ISO 1133	3.8
VICAT Softening Point	B/50	°C	ISO 306	86
Heat Deflection Temperature	1.8MPa	°C	ISO 75	85
Coefficient of Linear Expansion	-	1/°C	ASTM D696	7X10 <sup>-5</sup>
<b>MECHANICAL PROPERTIES</b>				
Charpy Impact Strength	notched	kJ/m <sup>2</sup>	ISO 179	5.5
Rockwell Hardness	M scale	-	ISO 2039-2	38
Tensile Strength at Break	5mm/min	MPa	ISO 527	35
Tensile Strain at Break	5mm/min	%	ISO 527	47
Tensile Modulus	1mm/min	GPa	ISO 527	1.7
Flexural Strength	2mm/min	MPa	ISO 178	65
Flexural Modulus	2mm/min	GPa	ISO 178	1.8
<b>GENERAL PROPERTIES</b>				
Density	-	g/cm <sup>3</sup>	ISO 1183	1.16
Mold Shrinkage	-	%	ASTM D955	0.4-0.8
Water Absorption	24hr	%	ASTM D570	0.4
Flammability UL94	1.5mm	Class	IEC 60695-11-10	HB
<b>RECOMMENDED PROCESSING CONDITIONS</b>				
Predrying Temperature	-	°C	-	60-70
Predrying Time in Desiccant-Type Drier	-	hr	-	4-6
Melt Temperature	-	°C	-	210-240
Mold Temperature	-	°C	-	50-70

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