

# PMMA Impact Resistant Grade

# HI553

## Description

Impact resistance grade

High light transmission

Good mechanical strength, surface hardness, weather resistance

Free colorability due to crystal clarity

## Application

Home appliance cover housing & front door, Multi-wall sheet, Corrugated sheet

Edgebands for furniture, Profile for lighting, Bath tubs

## Table

PROPERTY	CONDITION	UNIT	METHOD	VALUE
<b>OPTICAL PROPERTIES</b>				
Refractive Index	nd	-	ISO 489	1.49
Light Transmittance	3mm	%	ISO 13468-1	91
Haze	3mm	%	ISO 14782	<1.5
<b>THERMAL PROPERTIES</b>				
Melt Flow Index	230°C/3.8kg	g/10min	ISO 1133	6.4
VICAT Softening Point	B/50	°C	ISO 306	88
Heat Deflection Temperature	1.8MPa	°C	ISO 75	87
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	3.5
Rockwell Hardness	M scale	-	ISO 2039-2	62
Tensile Strength at Break	5mm/min	MPa	ISO 527	40
Tensile Strain at Break	5mm/min	%	ISO 527	30
Tensile Modulus	1mm/min	GPa	ISO 527	2.0
Flexural Strength	2mm/min	MPa	ISO 178	71
Flexural Modulus	2mm/min	GPa	ISO 178	2.0
<b>GENERAL PROPERTIES</b>				
Density	-	g/cm <sup>3</sup>	ISO 1183	1.17
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.