

# HX238

## Description

MMA(Methylmethacrylate)&SM(Styrene monomer) Copolymer

Low residual stress

Low water absorption rate

High light transmission & luminance

Good for optical application

Good mechanical strength, surface hardness, weather resistance

## Application

TV light guide panels, Monitor light guide panels, General sheet

## Table

PROPERTY	CONDITION	UNIT	METHOD	VALUE
<b>OPTICAL PROPERTIES</b>				
Refractive Index	nd	-	ISO 489	1.53
Light Transmittance	3mm	%	ISO 13468-1	91
Haze	3mm	%	ISO 14782	<0.5
Light Transmittance (Long path)	150mm	%	ISO 13468-1	90
Haze (Long path)	150mm	%	ISO 13468-1	1.5
<b>THERMAL PROPERTIES</b>				
Melt Flow Index	230°C/3.8kg	g/10min	ISO 1133	8.0
VICAT Softening Point	B/50	°C	ISO 306	105
Heat Deflection Temperature	1.8MPa	°C	ISO 75	100
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	1.4
Rockwell Hardness	M scale	-	ISO 2039-2	84
Tensile Strength at Break	5mm/min	MPa	ISO 527	65
Tensile Strain at Break	5mm/min	%	ISO 527	5.4
Tensile Modulus	1mm/min	GPa	ISO 527	3.0
Flexural Strength	2mm/min	MPa	ISO 178	105
Flexural Modulus	2mm/min	GPa	ISO 178	3.2
<b>GENERAL PROPERTIES</b>				
Density	-	g/cm <sup>3</sup>	ISO 1183	1.15
Mold Shrinkage	-	%	ASTM D955	0.2-0.6
Water Absorption	24hr	%	ASTM D570	0.18
Flammability UL94	1.5mm	Class	IEC 60695-11-10	HB
<b>RECOMMENDED PROCESSING CONDITIONS</b>				
Predrying Temperature	-	°C	-	80-90
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.