

PMMA
Impact Resistant Grade
HI855S

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
OPTICAL PROPERTIES				
Refractive Index	nd	-	ISO 489	1.49
Light Transmittance	3mm	%	ISO 13468-1	91
Haze	3mm	%	ISO 14782	<1.5
THERMAL PROPERTIES				
Melt Flow Index	230°C/3.8kg	g/10min	ISO 1133	5.4
VICAT Softening Point	B/50	°C	ISO 306	87
Heat Deflection Temperature	1.8MPa	°C	ISO 75	86
Coefficient of Linear Expansion	-	1/°C	ASTM D696	7X10 ⁻⁵
MECHANICAL PROPERTIES				
Charpy Impact Strength	notched	kJ/m ²	ISO 179	4.3
Rockwell Hardness	M scale	-	ISO 2039-2	53
Tensile Strength at Break	5mm/min	MPa	ISO 527	38
Tensile Strain at Break	5mm/min	%	ISO 527	46
Tensile Modulus	1mm/min	GPa	ISO 527	2.0
Flexural Strength	2mm/min	MPa	ISO 178	74
Flexural Modulus	2mm/min	GPa	ISO 178	2.1
GENERAL PROPERTIES				
Density	-	g/cm ³	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
RECOMMENDED PROCESSING CONDITIONS				
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.