

HX238 SMMA, Optical Grade

PROPERTY	CONDITION	UNIT	METHOD	VALUE
OPTICAL PROPERTIES				
Refractive Index	nd	-	ISO 489	1.53
Light Transmittance	3.2mm	%	ISO 13468-1	91
Haze	3.2mm	%	ISO 14782	<0.5
Light Transmittance (Long path)	150mm	%	ISO 13468-1	90.0
Haze (Long path)	150mm	%	ISO 13468-1	1.5
THERMAL PROPERTIES				
Melt Flow Index	230°C/3.8kg	g/10min	ISO 1133	8.1
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 ⁻⁵
MECHANICAL PROPERTIES				
Charpy Impact Strength	notched	kJ/m ²	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
GENERAL PROPERTIES				
Density	-	g/cm ³	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
RECOMMENDED PROCESSING CONDITIONS				
Predrying Temperature		°C		Max. 80
Predrying Time in Desiccant-Type Drier		hr		3-4
Melt Temperature		°C		210-240
Mold Temperature		°C		50-70

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