

ZENOPLEX ILLUMI - ACRYLIC

ZENOPLEX ILLUMI PROPERTIES	VALUE	UNIT	TEST METHOD
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GENERAL

Density	1.19	g/cm ³	ISO 1183-1:2019 Method A
Water Absorption	0.3	%	ISO 62:2008

MECHANICAL

Tensile Strength	63	MPa	ISO 527-2:2012
Tensile Strain at Break	3.6	%	ISO 527-2:2012
Tensile Modulus	2700	MPa	ISO 527-2:2012
Flexural Strength	99	MPa	ISO 178:2019 Method A,B
Flexural Modulus	2700	MPa	ISO 178:2019 Method A,B
Charpy Impact Strength, Notched	1.6	kJ/m ²	ISO 179-1:2010
Izod Impact Strength, Notched	1.4	kJ/m ²	ISO 180:2000+Amd.2:2013
Rockwell Hardness, L-scale	N/A		ASTM D785
Rockwell Hardness, M-scale	90		ASTM D785
Rockwell Hardness, R-scale	N/A		ASTM D785

THERMAL

Vicat Softening Temperature	102	°C	ISO 306:2013
Heat Deflection Temperature, 1.82MPa	92	°C	ISO 75-2:2013
Coefficient of Linear Thermal Expansion	7	m/m.K x 10 ⁻⁵	DIN53752
Self Ignition Temperature	430	°C	ASTM D 1929
Flash Ignition Temperature	330	°C	ASTM D 1929
Glow Wire Ignition Temperature (3mm)	725	°C	IEC 60695-2-13:2010+A1:2014
Burning Behaviour, Vertical	N/A		UL 94-2013/ Rev.9-2018 Section 8
Burning Behaviour, Horizontal	HB		UL 94-2013/ Rev.9-2018 Section 7
Continuous Service Temperature	70	°C	
Short Term Service Maximum Temperature	80	°C	
Moulding Range	195-235	°C	

OPTICAL

Light Transmission Clear (3mm)	N/A	%	520nm
Light Transmission Grey (3 mm)	N/A	%	520nm
Light Transmission Opal (3mm)	75	%	520nm
Refractive Index	N/A	n _D	DIN5036-3
Haze	72	%	ASM D1003