

CAST ACRYLIC

GENERAL			
Property	Method	Units	
Density	EN ISO 1183	g/cm ³	1,19

OPTICAL			
Property	Method	Units	
Light Transmission (clear) (3mm)	EN ISO 13468-1	%	93
Refractive Index (clear)	EN ISO 489	nD	1,492

MECHANICAL			
Property	Method	Units	
Tensile strength at break	EN ISO 527	MPa	75
Elongation at break	EN ISO 527	%	6
Tensile modulus	EN ISO 527	MPa	3300
Flexural Strength	EN ISO 178	MPa	125
Flexural modulus	EN ISO 178	MPa	3000
Impact strength Charpy Unnotched	EN ISO 179	kJ/m ²	15
Impact strength Charpy Notched	EN ISO 179	kJ/m ²	2

THERMAL			
Property	Method	Units	
Vicat softening temperature (B 50)	EN ISO 306	°C	115
Temperature of deflection underload (A 1,8 MPa)	EN ISO 75	°C	105
Coeff. of Linear Expansion	DIN 53752	K ⁻¹	70x10 ⁻⁶
Degradation temperature		°C	> 280
Thermal conductivity	DIN 52612	w/m.K	0,19

ELECTRICAL			
Property	Method	Units	
Relative permittivity (50Hz)	DIN 53483		3,6
Relative permittivity (1 KHz)	DIN 53483		3,1
Relative permittivity (1 MHz)	DIN 53483		2,7
Dielectric Strength	DIN 53481	kVmm	30
Surface Resistivity	DIN 53482	Ω	10 ¹⁴
Volume Resistivity	DIN 53482	Ωxm	10 ¹⁵

FIRE REACTION	
EN 11925-2	Classs E
BS 476/7	Class 3
NFP 92307	M4 (no drips)
UL94	HB

PROCESSING		
<input checked="" type="checkbox"/> Sawing	<input checked="" type="checkbox"/> Flame polishing	<input checked="" type="checkbox"/> Vacuum forming
<input checked="" type="checkbox"/> Drilling	<input checked="" type="checkbox"/> Diamond polishing	<input checked="" type="checkbox"/> Drape forming
<input checked="" type="checkbox"/> Milling	<input checked="" type="checkbox"/> Cold bending	<input checked="" type="checkbox"/> Glueing
<input checked="" type="checkbox"/> Lasercutting	<input checked="" type="checkbox"/> Warm bending	<input checked="" type="checkbox"/> Printing
<input checked="" type="checkbox"/> Laser engraving	<input checked="" type="checkbox"/> Oven curving	

Suggestions and data on datasheet are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use are beyond our control. We recommend that the prospective user determine the suitability of our materials and suggestions before adopting them on a commercial scale.