

Manufacturer/distributor: PyraSied Xtreme Acrylic

Brand: Versato®

Material: Clear Cast Acrylic sheets

Opal and colored acrylic remain within the reliability interval because of the very small amount of additives.

Physical-chemical properties

	Method	Unit Of measurement	Values
Physical Properties			
Density	ISO 1183	g/cm ³	1.19
Water absorption after 24h	ISOR62/DIN53495	%	0.3
Optic Properties			
Transmittance (on colourless material)	ISO 4892-1 DIN 5036	%	92
Haze (on colourless material)	ASTMD1003	%	<0.5
Refraction index (on colourless material)	ISO 4892/DIN 53491	°C	1.49
Mechanical Properties			
Coëfficiënt of elasticity due to pulling stress 23°C	ISO 527-2/1 B/1	MPa	3300
Ultimate elongation 23°C	ISO 527-2/1 B/5	%	5
Tensile strength 23°C	ISO 527-2/1 B/5	MPa	76
Flexing resistance	ISO 178	MPa	110
Compression resistance	ISO 604	MPa	110
IZOD impact resistance with notch	ISO 180/1 A	kJ/m ²	1.4
Charpy impact resistance without notch	ISO 179/1	kJ/m ²	13
Abrasion resistance	ISO 14782	%	0.5 to 1
Maximum allowed tension		MPa	5-7
Minimum cold curvature radius		mm	330 x thickness
Thermal Properties			
Softening temperature (Vicat)	ISO R 306 Method A 50	°C	> 108
Deflection temperature (HDT)	ISO 75/A	°C	> 102
Maximum long term use temperature		°C	80
Linear Expansion Coëfficiënt	VDE 0304/1	mm/mtr/10 °C	0.6
Thermal conductivity	DIN 52612	W/m/ °C	0.17
Fire behaviour			
Self-ignition temperature	DIN 51794	°C	430 c.a.
Fire behaviour	EN13501		E
Other Properties			
Poisson coëfficiënt	ISO 527 -1		0.39
Thermoforming Parameters			
Thermoforming interval		°C	140-190
Heating furnace temperature		°C	130-180
Maximum heating temperature		°C	200
Shrinkage after heating		%	2.5 max

This information is given as a guide and does not represent the technical specifications of the materials and therefore does not imply any responsibility on the part of PyraSied B.V. It's the responsibility of each user to establish that the material is suitable for his or her application.