Cast acrylic

TECHNICAL DATASHEET

Manufacturer/distributor: PyraSied Xtreme Acrylic

Brand: Versato®

Material: M1087

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	ISO 4892-1 DIN 5036	%	25
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 time (Vicat)	ISO R 306 Method A 50	°C	>108
Deflection time(HDT)	IS0 75/A	°C	>102
Maximum running time		°C	80
Linear Expansion Coëfficiënt	VDE 0304/1		7
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

PYRASIED *XTREME ACRYLIC*®

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