

## TDS (TECHNICAL DATA SHEET) CASTPLAS CAST ACRYLIC SHEET (OPB1)

GENERAL PROPERTIES	Method	Unit	Value
Density	ISO 1183-1	g/cm <sup>3</sup>	<b>1,19</b>
Water absorption	ISO 62	%	<b>0,5</b>
Rockwell hardness	ISO 2039-2	M scale	<b>103±0,4</b>
<b>MECHANICAL PROPERTIES</b>			
Tensile modulus	ISO 527-2/1B/1	MPa	<b>3065</b>
Tensile strenght	ISO 527-2/1B/5	MPa	<b>78,1</b>
Elongation	ISO 527-2/1B/5	%	<b>4,2</b>
Flexural modulus	ISO 178	MPa	<b>3610</b>
Flexural strenght	ISO 178	MPa	<b>127,8</b>
<b>Impact Resistance</b>			
Izod- unnotched	ISO 180/U1	kJ/m <sup>2</sup>	<b>14,8</b>
Izod- notched	ISO 180/A1	kJ/m <sup>2</sup>	<b>1,7</b>
Charpy- unnotched	ISO 179-1 FU	kJ/m <sup>2</sup>	<b>19,8</b>
Charpy- notched	ISO 179-1 EA	kJ/m <sup>2</sup>	<b>1,4</b>
<b>THERMAL PROPERTIES</b>			
Vicat softening temperature	ISO 306	°C	<b>Min.110</b>
Coefficient of linear thermal expansion	ISO 11359-2	mm/m°C	<b>7x10-5</b>
Temperature of deflection under load	ISO 75-2/A	°C	<b>104,58</b>
Dimensional change on heating (shrinkage)	Annex A	%	<b>2,4</b>
Specific Heat Capacity	-	J/g-°C	<b>1,46</b>
Thermal conductivity	-	W/m-K	<b>0,187</b>
<b>OPTICAL PROPERTIES</b>			
Light Transmission	ISO13468	%	<b>55,1</b>
Haze	ISO14782	%	<b>96,1</b>
<b>FLAMMABILITY</b>			
Horizontal burning	UL 94:2017	-	<b>HB</b>
Burning rate	-	(mm / dak)	<b>33,8</b>
Flammability classification	EN ISO 11925-2 :2011 EN ISO 13501-1 +A1:2013	Fs≤150 mm	<b>E</b>

\* The information in this table is given for general information about our products and application areas according to our current production technology and program. It does not constitute a guarantee for special conditions and applications. Please contact us for technical and detailed test information.

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