

# POLIESTIRENO TRASPARENTE

## CHARACTERISTICS

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This sheets have good optical properties and a brilliant surface. They are easy to fabricate, to vacuum from, and show a high light transmission (min 88% wavelength: 500 nm, thickness 3mm). important benefits of this product are their low price, low density (1.05), good chhemical resistence and high regidity. As a standard sheets are UV-stabilised and remain colour constant for many years when used indoors.

On special request, this sheets can be produced without UV-stabillisation. They then meet all current food contact legislation and can be used in contact with foodstuffs.

This sheets can also combine the following excelent properties:

- Excellent transparency
- Good surface hardness
- Good recyclability
- Low water absorption

## APPLICATIONS

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- Picture frames
- Shower cabin doors (flat and curved)
- Indoor glazing

## FABRICATION AND FINISHING TECHNIQUES

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The sheets are easy to handle. The fabricant offers a whole range of fabrication activities such as sawing, curving, drilling, etc.

Also, they can be machined using all the usual methods, such as sawing, milling, drilling, turning, grinding, polishing and thermoforming.

## TECHNICAL DATA

■ GENERAL				
Property		Method	Units	-
	Density	ISO 1183	g/cm <sup>3</sup>	1,05
	Rockwell Hardness	ISO 2039-1	M scale	150
■ OPTICAL				
Property		Method	Units	-
	Light Transmission	DIN 5036-3	%	89
	Refractive Index	ISO 489	n <sup>D</sup> <sub>20</sub>	1.59
■ MECHANICAL				
Property		Method	Units	-
	Flexural Modulus	ISO 178	MPa	3450
	Flexural Strength	ISO 178	MPa	85
	Tensile Modulus	ISO 527-2	MPa	3400
	Tensile Strength	ISO 527-2	MPa	45
	Elongation	ISO 527-2	%	3
	Charpy (notched)	ISO 179-1	kJ/m <sup>2</sup>	-
	Charpy (unnotched)	ISO 179-1	kJ/m <sup>2</sup>	6
■ THERMAL				
Property		Method	Units	-
	Vicat Temp. (VST/B 50)	ISO 306	°C	101
	Heat Deflection Temp. (A)	ISO 75-2	°C	86
	Specific Heat Capacity	ASTM D-2766	J/gK	1.8
	Coefficient of linear thermal expansion	DIN 53752	K <sup>-1</sup> x10 <sup>-5</sup>	8
	Thermal conductivity	DIN 52612	W/mK	0.16
	Degradation temperature		°C	> 280
	Max service temperature		°C	80
	Sheet forming temp. range		°C	130-170
■ ELECTRICAL				
Property		Method	Units	-
	Volume Resistivity	DIN 53482	Ω.cm	> 10 <sup>14</sup>
	Surface Resistivity	DIN 53482	Ω	> 10 <sup>14</sup>

Note: all mentioned data is based on extruded sheets in a thickness of 4 mm.

These technical data of our products are typical ones; the actually measured values are subject to production variations.