



## PRODUCT GUIDE

Lighter, with much greater stiffness. Vastly reduces costs.





## POLYCASA® SAN IS A SHEET MATERIAL WHICH OFFERS MANY UNUSUAL FEATURES OVER CONVENTIONAL CLEAR SHEETS.

A weight reduction of 10%, combined with a much higher stiffness value, means that you could use a sheet up to a third thinner than normal, vastly reducing your material cost budget. It also offers outstanding resistance to both moisture and chemical absorption – making SAN easier to maintain, and, with the UVP+ version, perfect for applications like greenhouse glazing.

With light weight and UV resistance properties, Polycasa SAN is the perfect choice for industrial door glazing, showing big savings on energy costs where electric motors are used to control the door opening.



### PRODUCT IDENTIFICATION

Polycasa SAN is the trade name for extruded Styrene Acrylonitrile (SAN) copolymer sheets from Polycasa.

The SAN programme offers solutions to both indoor and outdoor applications. (For external use, Polycasa SAN UVP, incorporating UV protection should be used.)

As a result of the extrusion and lamination process, Polycasa can offer a variety of designs, as well as the glass clear version.

The almost unlimited application possibilities of Polycasa SAN offer the industry new opportunities in order to stimulate creativity.

### CHARACTERISTICS

- Good optical properties and a brilliant surface.
- Easy to handle and vacuum form.
- Show a very good dimensional stability.
- Very good chemical resistance: to most fats, dilute acid solutions, oils and common bleaching agents, as well as some solvents and weak alkaline solutions.
- Can be used in - and outdoor (in UVP version) and are resistant to temperature fluctuations.
- Can be used in contact with foodstuffs (non UV version).

### APPLICATIONS

- Industrial (door) glazing.
- Covers for foodstuffs.
- Covers for office equipment.
- Screen printing.
- Advertising signs.
- Fittings for shops and exhibitions.
- Displays.
- Flat or curved shower screens.
- Greenhouse glazing.
- Room dividers.

### PRODUCT RANGE

- Available in crystal clear or opal finish.
- Special colours: black, white, smoke grey and warm bronze, available upon request, subject to conditions.
- Standard thicknesses range from 1.5 to 6 mm.
- Patterned and prismatic sheets are also available, subject to special conditions.

Please contact your local customer service centre for a complete product overview. For details see back of brochure.

## TECHNICAL INFORMATION

GENERAL			
Property	Method	Unit	SAN
Density	ISO 1183	g/cm <sup>3</sup>	1.08
Rockwell hardness	ISO 2039-2	M scale	83
OPTICAL			
Property	Method	Unit	SAN
Light transmission	DIN 5036-3	%	86
Refractive index	ISO 489		1.57
MECHANICAL			
Property	Method	Unit	SAN
Flexural modulus	ISO 178	MPa	3750
Flexural strength	ISO 178	MPa	105
Tensile modulus	ISO 527-2	MPa	3900
Tensile strength	ISO 527-2	MPa	60
Elongation	ISO 527-2	%	1.8
THERMAL			
Property	Method	Unit	SAN
Vicat temperature (B)	ISO 306	°C	106
Heat deflection temperature (A/B)	ISO 75	°C	98/101
Specific heat capacity	ASTM D-2766	J/gK	1.38
Coefficient of linear thermal expansion	DIN 53752	K <sup>-1</sup> x10 <sup>-5</sup>	5-7
Thermal conductivity	DIN 52612	W/mK	0.17
Degradation temperature		°C	>280
Max. service temperature		°C	85
Sheet forming temperature range		°C	165-190
IMPACT STRENGTHS			
Property	Method	Unit	SAN
Izod (notched)	ISO 180	KJ/m <sup>2</sup>	1.3
Charpy (unnotched)	ISO 179-1	KJ/m <sup>2</sup>	13
ELECTRICAL			
Property	Method	Unit	SAN
Volume resistivity	IEC 6093	Ω.cm	10 <sup>14</sup>
Surface resistivity	IEC 6093	Ω	>10 <sup>15</sup>

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

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





**POLYCASA**

YOUR HOME  
FOR PLASTICS  
AND COMPOSITES

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