



## PRODUCT GUIDE

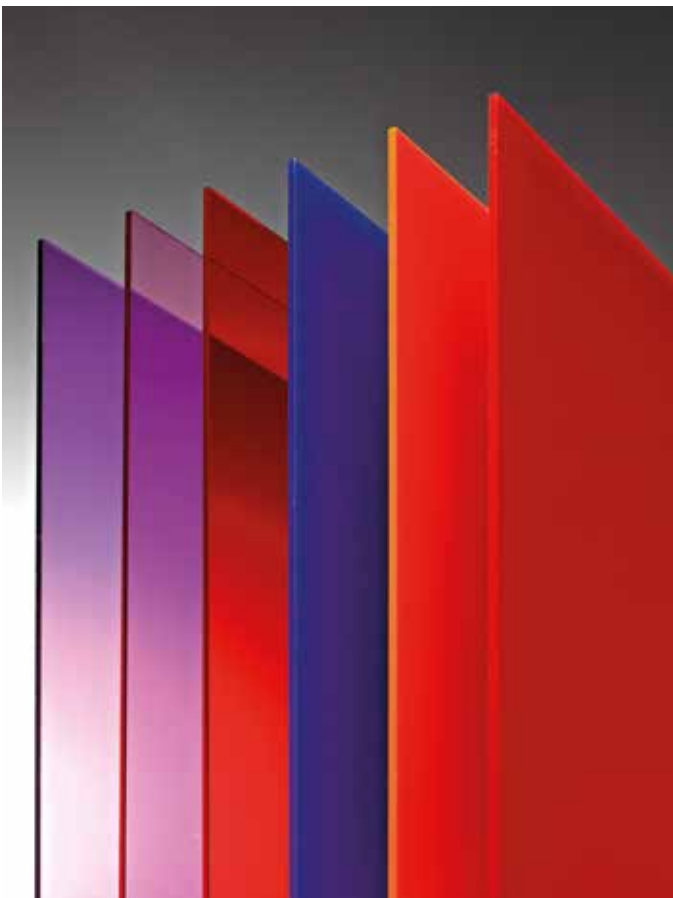
Sparkling clarity and easily formed into shapes.



## AKRYLON® IS OUR MOST WIDELY USED SHEET AND IS PERFECT FOR RETAIL, MAGAZINE SHELVING AND LIGHTING CONTROLLERS.

With sparkling clarity and the ability to be formed into shapes that blend into a store layout, you hardly notice it: the material does its job without distracting from the products being displayed.

And when used in the sign industry, AKRYLON® provides long lasting UV resistant signs — so your products get the promotion they deserve.



### PRODUCT IDENTIFICATION

AKRYLON® is one of the trade names of Polycasa for extruded acrylic (polymethylmethacrylate PMMA) in the form of large dimensional sheets.

The material is thermoplastic and suitable for forming, bending or direct use in the form of cut-to-size panels.

### CHARACTERISTICS

- Good optical properties — brilliant transparency showing excellent colour.
- High-quality surfaces — very good weathering and ageing resistance.
- High surface stability/resistance — backed up with a ten year guarantee.
- Can be used in contact with foodstuffs.
- Good recyclability.

### APPLICATIONS

- Construction components: light domes, partition walls, glazing, roofing, caravan windows.
- Lighting: coloured and opal diffusers.
- Engineering components: housings, machine covers.
- Advertising and decoration: letters, shop fittings, panels, Point Of Purchase displays.
- Highway construction: sound barrier walls.
- Other applications: containers, lettering templates, solariums UVT (UV-transmitting grade).

### PRODUCT RANGE

- A palette of colours is available in opaque, opal, transparent and translucent.
- Standard range of thickness is from 1.8 to 15 mm.
- Special product: AKRYLON® UV transmitting.
- Special thicknesses, colours can be produced to order, subject to 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	AKRYLON®
Density	EN ISO 1183	g/cm <sup>3</sup>	1.19
OPTICAL			
Property	Method	Unit	AKRYLON®
Light transmission (3mm)	EN ISO 13468-1	%	93
Refractive index	EN ISO 489	nD	1.492
Haze (AKRYLON® clear)	ISO 14782	%	0.6
MECHANICAL			
Property	Method	Unit	AKRYLON®
Tensile strength at break	EN ISO 527-2	MPa	70
Elongation at break	EN ISO 527-2	%	4
Tensile modulus	EN ISO 527-2	MPa	3200
Flexural strength	EN ISO 178	MPa	115
Ball indentation hardness	EN ISO 2039-1	N/mm <sup>2</sup>	175
Impact strength - Charpy unnotched	EN ISO 179	kJ/m <sup>2</sup>	17
Impact strength - Charpy notched	EN ISO 179	kJ/m <sup>2</sup>	2
THERMAL			
Property	Method	Unit	AKRYLON®
Vicat softening temperature (B 50)	EN ISO 306	°C	105
Temperature of deflection underload (A 1,8 MPa)	EN ISO 75	°C	95
Coefficient of linear expansion	DIN 53752	K <sup>-1</sup>	70x10 <sup>-6</sup>
Degradation temperature		°C	>280
Combustibility grade	EN 13501-1		E
ELECTRICAL			
Property	Method	Unit	AKRYLON®
Relative permittivity (50Hz)	DIN 53483-2		2.7
Relative permittivity (1 kHz)	DIN 53483-2		3.1
Relative permittivity (1 MHz)	DIN 53483-2		2.7
Dielectric strength	DIN 53481	kVmm	30
Electrical strength	IEC 60243-1	kVmm	10
Surface resistivity	IEC 60093	Ω	3x10 <sup>15</sup> -3x10 <sup>16</sup>
Volume resistivity	IEC 60093	Ωxm	1x10 <sup>13</sup> -5x10 <sup>13</sup>





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