AKRYLON®

PRODUCT GUIDE

Sparkling clarity and easily formed into shapes.

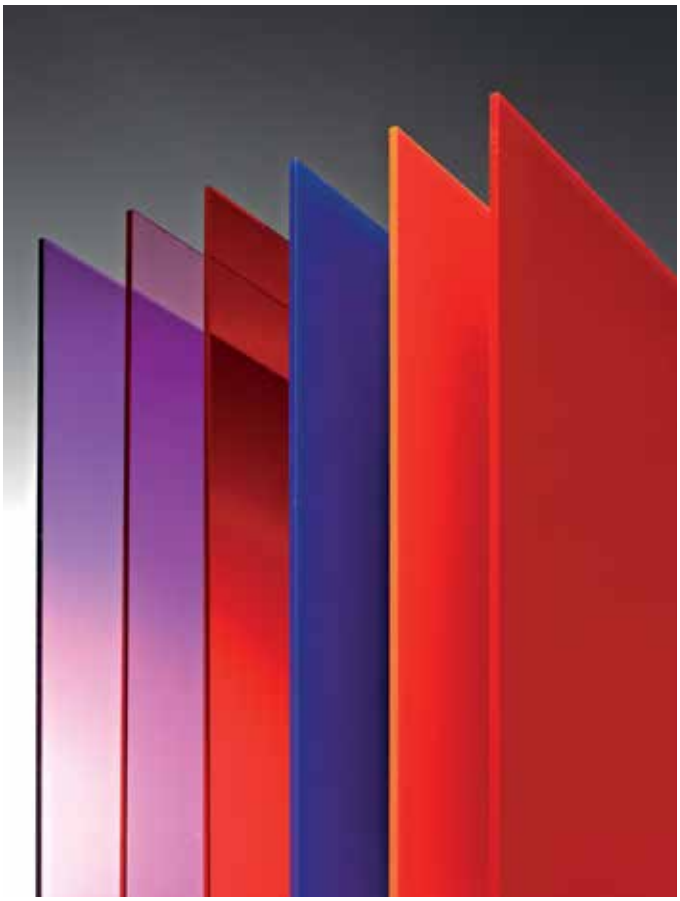
3A COMPOSITES | POLYCASA

AKRYLON®

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^3	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^2	175
Impact strength - Charpy unnotched	EN ISO 179	kJ/m^2	17
Impact strength - Charpy notched	EN ISO 179	kJ/m^2	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^{-1}	$70x10^{-6}$
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	$3x10^{15}$ -$3x10^{16}$
Volume resistivity	IEC 60093	Ωxm	$1x10^{13}$ -$5x10^{13}$

COMPOSITES

POLYCASA

YOUR HOME
FOR PLASTICS
AND COMPOSITES

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