

PRODUCT TECHNICAL DATA SHEET

MG Acryl Extruded Acrylic sheet is crystal clear, impact resistant and weather resistant. It offers easily thermoformed and bendable. Acrylic sheet is most durable thermoplastic material for resisting scratches.

Compare to glass panel, acrylic sheet reduces heat transfer. It is between 2-10 times stronger than double strength glass. It is half the weight of glass and shatter resistant and easy to transport. It is recommended for both indoor and outdoor applications.

It is crystal clear edge color and excellent optical properties.

Technical information

GENERAL

Property	Method	Units	Values
Density	ISO 1183	g/cm ³	1.19
Water absorption 24h/23°C – 50x50x4mm ³	ISO 62	%	0.2
Forming temperature air pressure		°C	140-160
Forming temperature vacuum		°C	160-190
Moulding shrinkage		%	0.5-0.8

MECHANICAL

Property	Method	Units	Values
Tensile strength	ISO 527-2	MPa	70
Elongation at break	ISO 527-2	%	4
Tensile modulus	ISO 527-2	MPa	3200
Flexural strength	ISO 178	MPa	115
Flexural modulus	ISO 178	MPa	3300
Ball indentation hardness	ISO 2039-1	N/mm ²	175
Impact strength Charpy unnotched	ISO 179-1	kJ/m ²	17
Impact strength Charpy notched	ISO 179-1	kJ/m ²	2

THERMAL

Property	Method	Units	Values
Vicat temperature (B 50)*	ISO 306	°C	105
Specific heat capacity	IEC 1006	J/gK	1.47
Linear thermal expansion	DIN 53752	K ⁻¹ *x10 ⁻⁵	7
Thermal conductivity	DIN 52612	W/mK	0.18
Service temperature continuous use		°C	70
Max. temperature short term use		°C	90
Degradation temperature		°C	>280

OPTICAL

Property	Method	Units	Values
Light transmission (3mm)	ISO 13468-1	%	93
Refractive index	ISO 489	nD	1.492

ELECTRICAL

Property	Method	Units	Values
Surface resistivity	IEC 60093	Ω	3x10 ¹⁵ - 3x10 ¹⁶
Volume resistivity	IEC 60093	Ω x m	1x10 ¹³ - 5x10 ¹³
Electrical strength	IEC 60243-1	kV/mm	10
Dielectric strength	DIN 53481	kV/mm	30
Dielectrical dissipation factor 50 Hz	DIN 53483-2		0.06
Dielectrical dissipation factor 1 KHz	DIN 53483-2		0.04
Dielectrical dissipation factor 1 MHz	DIN 53483-2		0.02
Relative permittivity 50 Hz	DIN 53483-2		2.7
Relative permittivity 1 KHz	DIN 53483-2		3.1
Relative permittivity 1MHz	DIN 53483-2		2.7

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

Specification, Size

Thickness	mm	1.5 - 10 \pm 0.05
Colour	----	As per customer requirement
Surface of Plate	-----	Plain
Width	mm	1220 & 2100 \pm 5
Length	mm	As per customer requirement (\pm 10)

Note: - we can produce customize colors & sizes