

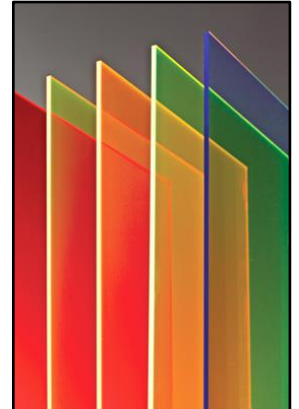
NEON TECHNICAL DATA SHEET

1. PRODUCT IDENTIFICATION

CRYLUX® Neon is the brand name for CAST polymethylmethacrylate sheets from POLYCASA, in bright, fluorescent colours suitable for indoor use ONLY.

The high brightness of the colour is achieved as the light absorbed by the sheet is multiplied and driven to the edges or to a letter or design engraved on the surface, making the colours appear to be glowing.

It is characterised by good impact strength and light weight. Excellent light transmission makes it particularly suitable for the signage and advertising industries.



2. CHARACTERISTICS

Our fluorescent transparent CRYLUX® Neon is a brilliantly coloured sheet that you can see through. Not UV resistant (indoor use only)¹. Their main characteristics are:

- Good impact strength.
- Light weight.
- Excellent light transmission.
- Low water absorption.

¹POLYCASA offers alternative range CRYLUX® Neon OUT suitable for outdoor use. This range is available upon demand and subjected to special conditions.

3. APPLICATIONS

These five available colours appeal to everyone from designers and architects, through to product display builders and exhibition stand designers. Some possible indoor applications:

- Displays.
- Signage.
- Decorations.
- Furniture.

NEON TECHNICAL DATA SHEET**4. FABRICATION AND FINISHING TECHNIQUES**

POLYCASA CAST sheets are easy to handle. Suitable for any manufacturing technique.

Sawing, drilling, gluing, printing, milling, mechanical polishing, vacuum forming, hot bending do not offer any problems to the CRYLUX[®] Neon.

More detailed information on these items can be found in our "USER GUIDE".

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5. TECHNICAL DATA

GENERAL			
Property	Method	Units	CRYLUX®
Density	ISO 1183	g/cm ³	1.19
Water absorption	ISO 62, Method A	%	0.2
Rockwell Hardness	ISO 2039-2	M scale	100
	ISO 2039-2	M scale	105
MECHANICAL			
Property	Method	Units	CRYLUX®
Tensile Strength	ISO 527	MPa	75
Elongation	ISO 527	%	6
Tensile Modulus	ISO 527	MPa	3400
Flexural Strength	ISO 178	MPa	120
Flexural Modulus	ISO 178	MPa	3200
Charpy (unnotched)	ISO 179	kJ/m ²	17
Charpy (notched)	ISO 179	kJ/m ²	2
THERMAL			
Property	Method	Units	CRYLUX®
Vicat Temp. (VST/B 50)	ISO 306	°C	110
Specific Heat Capacity	ISO 3146-C-60°C	J/g.K	2.16
Linear thermal expansion	ISO 11359-2	mm/m°C	0.07
Thermal conductivity	DIN 52612	W/m.K	0.19
Max. service temperature continuous use		°C	80
Max service temperature short term use		°C	90
Degradation temperature		°C	>280
OPTICAL			
Property	Method	Units	CRYLUX®
Light transmission ²	EN 13468-2	%	92
Refractive index	ISO 489	n ^D ₂₀	1.492
ELECTRICAL			
Property	Method	Units	CRYLUX®
Surface resistivity	IEC 60093	Ω	10 ¹⁴
Volume resistivity	IEC 60093	Ω x m	10 ¹⁵
Electrical strength	IEC 60243-1	kV/mm	10
Dielectric strength	DIN EN 60243-1	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

²Typical value for clear sheet in 3 mm. Depending on the thickness and colour this value may change.

NEON TECHNICAL DATA SHEET**NOTE:**

Our technical recommendations are without legal obligation. The information given in this brochure is based on our knowledge and experience to date. It does not release the user from the obligation of carrying out their own tests and trials, in view of the many factors that may affect processing and application; neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.