

ACRILICO COLATO CRYLUX[®] Design



1. PRODUCT IDENTIFICATION

CRYLUX[™] is the brand name for cast polymethyl methacrylate from POLYCASA.
The composition of the final product is 95-99% PMMA + additives (stabilisers, dyes, pigments and release agents).

CRYLUX[™] possibilities, characteristics and extraordinary range of colours cover all needs in construction, industry, decoration, lighting & publicity.

2. CHARACTERISTICS

CRYLUX[®] Design is an acrylic sheet with non-glare surfaces. Due to its intrinsic properties, it is specially designed to intensify light dispersion. Its matt surfaces increase the dispersion effect compared to CRYLUX[™] standard material and make it especially suitable for display applications. By using this material, for example in advertisements or displays, the image will be enhanced, and the result will be very clear, whilst maintaining the same mechanical properties as CRYLUX[™] standard sheet

3. APPLICATIONS

- Decorative furnishing.
- Interior design.
- Signs / Publicity.
- POP displays.
- Showcases.
- Shop fittings.
- Sign Panels.
- Corporate gifts.
- Shop sign.

4. FABRICATING AND FINISHING TECHNIQUES

CRYLUX[®] Design sheets are easy to handle.
Sawing, drilling, gluing, printing, milling, mechanical polishing, vacuum forming, hot bending do not offer any problems to the CRYLUX[™] range.

More detailed information on these items can be found in the "USER GUIDE", available on request. However, there are some recommendations in the following processes:

Bonding:

CRYLUX[®] Design can be easily bonded using the same glues recommended for standard acrylic material (PolycasaGlu 20, PolycasaGlu 30 and PolycasaGlu 75). In order to maintain CRYLUX[®] Design matt effect, any contact of the glue with matt surfaces must be avoided. (the glue fills the grooves, and the matt effect disappears).

Engraving:

CRYLUX[®] Design can be printed/engraved in the same way as CRYLUX[™] standard material obtaining excellent results.

Polishing:

To polish CRYLUX[®] Design edges, any usual method could be used. Due to the high temperature, flame polishing could affect the matt effect in the heated zone. It is best to avoid this process.

Thermoforming:

CRYLUX[®] Design can be hot bent using the same conditions recommended for our standard material without losing its optical properties (between 160°C and 190°C, depending on the final shape). The matt effect is permanent, remaining after thermoforming. Surface matt appearance will be related to the shape, depending on the depth of the moulding.

5 TECHNICAL INFORMATION

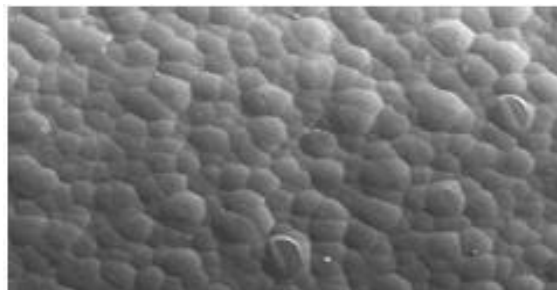
CRYLUX[®] Design has the same general, mechanical, thermal, impact and electrical properties as CRYLUX[™] standard material (UNE-EN-ISO 7823:2003).

There are some differences in optical properties as a result of the matt surface.

PROPERTY	CRYLUX [™] standard	CRYLUX [®] Design
Brightness (60° light source)	>120	14
Light transmission		
Clear	93%	90%
Opal 2000	71%	60%
Glass look 1512	91%	86%
Blue 1875	72%	67%

The surface finish makes CRYLUX[®] Design much less sensitive to scratches and fingerprint marking.

Analysis SEM of the surface



6. COLOUR RANGE

Colour reference	Design/MAT	Light transmission (3 mm thickness)
Arctic Mist 1000	Design	90% ⁽¹⁾
Iceland White 2008	Design	78% ⁽¹⁾
Antarctic white 2000	Design	75%
Everglade Green 1512	Design	86% ⁽¹⁾⁽²⁾
Evian Blue 1875	Design	76% ⁽²⁾
Tahiti Blue 1809	Design	26%
Cape Town yellow 1212	Design	64%
Seville Orange 1307	Design	48% ⁽²⁾
Bordeaux Red 1600	Design	41% ⁽²⁾
China Rose 2614	Design	38%
Bali Green 1549	Design	7%
Havana Brown 1438	Design	20% ⁽²⁾
Glacier Green 1560	Design	32%
Artic Mist 1000	MAT	90% ⁽¹⁾
Village Green 2512	MAT	44%
Nordic Blue 2811	MAT	52%
Parma Violet 2701	MAT	60%
Petra Rose 2608	MAT	25%
Mexican Orange 2305	MAT	46%

Colour reference	Design/MAT	Light transmission (3 mm thickness)
California Yellow 1271	Design	75%
Lisbon Orange 1371	Design	62%
Cypress Green 1571	Design	80%
Bavarian Green 1572	Design	68%
Cancun Pink 1671	Design	71%

- (1) Measured in Mainz
(2) %LT for 5 mm thickness

Measure conditions: Dual-beam spectrophotometer / wavelength from 400 nm to 700 nm / illuminant D65 / observer 10°.

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