BARLO® CAST

DESIGN

Technical datasheet

BARLO® CAST design

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1. PRODUCT IDENTIFICATION

BARLO CAST is the brand name for cast polymethyl methacrylate from Quinn Plastics.
The composition of the final product is 95-99% PMMA + additives (stabilisers, dyes, pigments and release agents).
BARLO CAST possibilities, characteristics and extraordinary range of colours cover all needs in construction, industry, decoration, lighting & publicity

2. CHARACTERISTICS

BARLO CAST '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 BARLO CAST 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 BARLO CAST standard sheet.

3. APPLICATIONS

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

4. FABRICATION AND FINISHING TECHNIQUES

BARLO CAST 'design' sheets are easy to handle.
Sawing, drilling, gluing, printing, milling, mechanical polishing, vacuum forming, hot bending do not offer any problems to the BARLO CAST 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:
BARLO CAST design can be easily bonded using the same glues recommended for standard acrylic material (Colacril 20, Colacril 30 and Colacril 75). In order to maintain BARLO CAST design matt effect, any contact of the glue with matt surfaces must be avoided.

Engraving:
BARLO CAST 'design' can be printed/engraved in the same way as BARLO CAST standard material obtaining excellent results.

Polishing:
To polish BARLO CAST '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:
BARLO CAST 'design' can be hot bent using the same conditions recommended for our standard material without losing its optical properties (between 160ºC and 190ºC, 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.

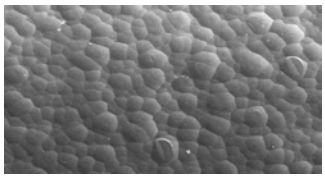
5. TECHNICAL INFORMATION

BARLO Cast 'design' has the same general, mechanical, thermal, impact and electrical properties as BARLO Cast standard material (ISO 7823:1998).

There are some differences in optical properties as a result of the matt surface.
The chart below details the differences:

Property	BARLO CAST 'Standard'	BARLO CAST '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 BARLO CAST 'design' much less sensitive to scratches and fingerprint marking.



Analysis SEM
of the surface