



ACRYLIC SHEET

Altuglas® Essential

Altuglas® Essential

Altuglas® Essential is an acrylic sheet with high resistance to chemicals, for your display fittings, perfume dispensers and other promotional accessories.

In today's market, promotion of products and POS (point-of-sale) advertising are keys to the consumer's decision-making process. For that reason, packaging and promotion must be beyond reproach and must not alter over time or with handling.

Standard CN or EX PMMA sheet, essential components of your display fittings, perfume dispensers and other promotional accessories, may deteriorate through crazing, caused by contact with certain chemical agents contained in products such as perfume diluents. Deterioration is particularly noticeable on areas that have received treatment such as bending, flame polishing, milling, forming, etc.

The mechanical constraints applied during production processes using CN and EX PMMA sheet create internal stresses in the material. These become apparent to the eye after evaporation of a chemically active substance. Once present, the crazing is irreversible and continues to spread. This deterioration, familiar to POS fitting manufacturers, alters the appearance of the parts and makes them mechanically weaker. EX PMMA sheet is even more sensitive to this phenomenon than CN acrylic sheet and hitherto the only solution has been varnishing, which provides a lengthy, expensive but only partial solution to protecting the sheets.

■ **The Altuglas® Essential solution**

Altuglas® Essential, a new product in the Altuglas International range, is the solution for the majority of changes to which these products are subject. Indeed, Altuglas® Essential is 60 times more resistant than a standard EX acrylic sheet and 5 times as resistant as a CN acrylic sheet when in contact with a perfume diluent (testing in accordance with the ISO/CD 22088-3 standard).



■ **Wide range of applications**

Outside the P.O.S field, Altuglas® Essential offers enhanced protection and longer life in a variety of applications:

- Medical and laboratory: Laboratory equipment, fume cupboards, etc,
- Pool barriers or shelters: Altuglas® Essential reduces the potential risk of crazing appearing on cast or extruded PMMA sheet that comes in contact with certain sun-creams,
- Industrial: Safety hood protection.

■ **Processing**

The time and temperature for heating Altuglas® Essential prior to thermoforming are identical to those for standard CN PMMA sheet. Fluidity when stretching is slightly reduced. You are advised to consult the technical brochure.

■ Gluing

Resistance of Altuglas® Essential to gluing is reduced by 25% for S 2002 Adhesive and by 20% for P10 Adhesive.

■ Maintenance

Altuglas® Essential sheet can be cleaned in exactly the same way as standard CN PMMA sheet. Use of Altuglas® Cleaner Ref 533 10000 is recommended. Do not dry-rub.

■ Caution

While Altuglas® Essential is remarkably resistant to chemical attack, it can show weakness in certain circumstances, for instance when sprayed with perfume diluent after laser cutting. We would

therefore advise customers to evaluate the properties of Altuglas® Essential through validation trials.

Processing of Altuglas® Essential is identical to that of Altuglas® CN. You are advised to consult the Altuglas International technical brochure.

■ Range

Clear Altuglas® Essential is available in thicknesses from 3 mm to 20 mm, in the 3050 x 2030 mm format, under reference number 163 10000. Colours can be produced to order, see the Altuglas International delivery program.

■ Stringent trials



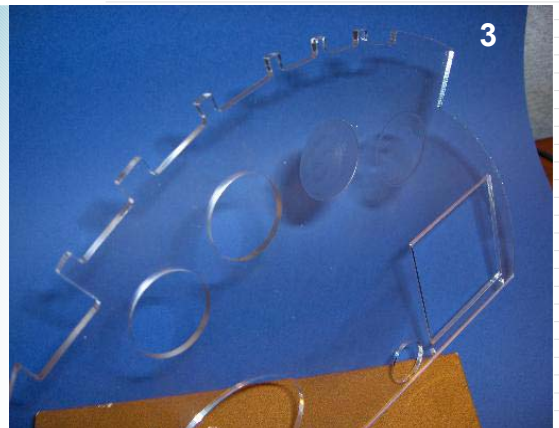
Photo 1: on the right, grooving and bending sheet of Altuglas® Essential.

On the left, standard CN PMMA sheet, after spraying with perfume diluent. After 3 months, there is still no crazing with Altuglas® Essential.

Photo 2 :
Crazing of a piece of standard CN PMMA after forming, flame polishing and then spraying with a perfume diluent (right-hand part).



Photo 3 :
Appearance of a piece of Altuglas® Essential after forming, flame polishing and then spraying with a perfume diluent (right-hand part).



Altuglas® Essential remains unaffected even after these two particularly critical processes.

Information contained in the present document is provided in accordance with our own laboratory testing. The Altuglas International company can accept no consequent liability.

Altuglas International

6, cours Michelet – Cedex 52
F 92064 Paris La Défense 10
Tel : +33 (0)1 49 00 80 80
Fax :+33 (0)1 49 00 89 59

Altuglas® is a registered trademark of Arkema.

www.altuglasint.com

Altuglas International April 2006.