

## **ADHESIVES & CLEANERS**



A COMPREHENSIVE, PROVEN RANGE DEVELOPED FOR SIGNMAKERS, POP PRODUCERS & PLASTIC FABRICATORS



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### P10

### Structural Strength Adhesive for Bonding Cast and Extruded Acrylics

A two-component cement developed to produce structural strength bonds. It is suitable for forming edge to edge, edge to surface and corner joints and can also be used for laminating large surface areas. In addition P10 has excellent gap filling properties.

Altuglas P10 is a viscous solution of PMMA and MMA monomer. A catalyser (Additive B) is added to cause polymerisation of the monomer into PMMA polymer, giving optimum results in terms of appearance, tensile strength and resistance to ageing.

#### **Application**

Altuglas P10 is a fluid adhesive which can be applied using a syringe (without needle), a polyethylene bottle with applicator tip or, for large areas, by pouring. Internal stress points caused by machining and moulding processes must be eliminated prior to bonding to avoid the risk of crazing.



### Properties Drying and Hardening:

External surfaces are normally dry within 2 hours and the bonded pieces can be handled (with care) in 2 - 3 hours.

However, allow 24 hours for a full cure before machining.

#### **Tensile Strength:**

After 4 days of natural hardening -45 - 50 MPa After post curing for 4 hours at 60°C -48 - 53 MPa



Altuglas SPC is a single-component adhesive which contains a blend of solvents. Its effect is to slightly dissolve the surface of the components to be joined, forming a weld between the components

### SPC

## Solvent Welding for Extruded Acrylic and Polycardonare

It is quick and easy to use and forms initial bonds in 20 seconds, with manageable bonds in 20 minutes. It is an ideal adhesive for use on edge to edge, corners, edge to surface and for glueing of small components when speed is essential.

#### Application

Altuglas SPC is easy to apply. If there is no pre-assembly, a thin line of glue is applied to one of the surfaces using a syringe with a needle. It can also be applied by brush and its high fluidity means it can be applied by capillary action.

There is no stress crazing with Altuglas SPC - even on line bent acrylic - and the result is clear, strong joints.

#### **Properties**

#### **Drying and Hardening**

External surfaces of glued areas dry instantly. Bonded items can be handled after a few minutes, but users are advised to wait for at least 24 hours before machining.

#### **Tensile Strength**

After 4 days of natural hardening - 10 - 15 MPa.



## **S2000 E**



**S2000** 

### Safe Solvent Welding of Cast Acrylics

Altuglas S2000 is a single component adhesive designed to provide clear, strong bonds in edge and small lap joints, in the production of POP units and in general fabrication work. Because it contains no chlorinated solvents, it is safer to use than many alternative products.

#### **Application**

Altuglas S2000 is a low viscosity adhesive which can be applied using a syringe (without needle) or a polyethene bottle with an applicator nozzle. If there is no prior assembly, apply a bead of adhesive to one of the surfaces to be bonded.

If the pieces have been assembled prior to bonding, the adhesive can be applied to the joint using a syringe. The substrates should be held in place under light, uniform pressure as the adhesive sets.

Internal stresses caused by machining and moulding processes must be eliminated prior to bonding to avoid the risk of crazing.

Surfaces to be glued must be clean and completely dry and the areas surrounding the joint should be protected with polypropylene tape. Prior assembly of pieces can also be done using polypropylene tape.

#### **Properties**

Drying and Hardening: The external surfaces of the joints will be dry in 20 - 30 minutes and manageable bonds are formed in approximately 60 minutes.

#### Tensile Strength:

After 13 days of natural hardening 27 - 32 MPa After post-curing for 4 hours at 60°C 35 - 45 MPa

### Solvent Welding with some gap fill



A single component adhesive with similar characteristics to S2000, but in a thickened format to provide some gap fill in addition to solvent welding capability.

#### Application

Can be applied using a polyethylene bottle with an applicator nozzle. If there is no prior assembly, apply a bead of glue to one of the surfaces to be bonded.

If the pieces have been assembled prior to bonding, the adhesive can be applied to the joint using a syringe. The substrates should be held in place under light, uniform pressure as the adhesive sets.

Internal stresses caused by machining and moulding processes must be eliminated prior to bonding to avoid the risk of crazing.

Surfaces to be glued must be clean and completely dry and the areas surrounding the joint should be protected with polypropylene tape.

Prior assembly of pieces can also be done using polypropylene tape.

#### **Properties**

Drying and Hardening: The external surfaces of the joints will be dry in 20 - 30 minutes and manageable bonds are formed in approximately 60 minutes.

#### Tensile Strength:

After 13 days of natural hardening 27 - 32 MPa After post-curing for 4 hours at 60°C 35 - 45 MPa



## **S2003 E**

## Lower solvent content for even greater safety

Altuglas S2003E has a similar viscosity to S2000E and therefore provides equivalent gap fill in addition to solvent welding capability. However, in addition to a complete absence of chlorinated solvents, S2003E is formulated with a lower overall solvent content than S2000 and S2000E, making it even safer in use particularly in confined areas.

#### Application

Can be applied using a polyethylene bottle with an applicator nozzle.

#### **Properties**

Drying and Hardening: The external surfaces of the joints will be dry in 20 - 30 minutes and manageable bonds are formed in approximately 60 minutes.

## **CLEANER**



Developed to clean Altuglas Acrylic sheet. It contains a small amount of Silicone which gives the cleaned surface some water repellancy qualities.

#### **Applications**

Altuglas Cleaner is suitable for general fabrication applications and is also widely used by the military for clearing windscreens on aircraft and windows on submarines. It has been specified by NATO for these applications.

Shake the container gently and spray the cleaner on to a clean, lint free cloth Wipe over the plastic sheet, spreading the cleaner evenly over the whole surface.

Two cleaners which have been specially formulated for the cleaning and protection of Altuglas Acrylics - but which can also be used on a wide range of plastics - are available through Altumax.

### ANTI STATIC CLEANER

This product will clean most plastics and provides an antistatic coating for at least one month. Altuglas Antistatic Cleaner has been formulated to wipe clean without leaving any streaks. It is ideal for preparing substrates before fabrication and for protecting all finished items.

#### Application

In addition to cleaning and protecting acrylics and most rigid plastics, Altuglas Antistatic Cleaner is also suitable for use on TV and Computer screens, display cabinets, glass, windows, etc. Simply shake the bottle and spray the cleaner on to a clean, lint free cloth. Wipe over the plastic, spreading the cleaner evenly over the whole surface.



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### **PRODUCT DATA**

#### **HEALTH & SAFETY**

Health and Safety Notes are printed on all Altuglas Adhesive Containers. Users should read the notes carefully and follow the guideline provided:

- Some adhesives are highly flammable. Do not smoke during use. Store adhesives away from heat and protect from all ignition sources.
- Some adhesives can irritate the skin, eyes and respiratory tract:
- . Do not breathe the fumes
- · Work in well ventilated areas
- Avoid contact with the eyes and mucous membranes
- Avoid contact with the skin.

#### **PACKAGING**

Altuglas Adhesives are packed in aluminium bottles for safety reasons.

#### **Altuglas P10**

Available in outers of: 12 x 0.5kg

12 x 1.0kg 1 x 10kg

**Altugias SPC** 

Available in outers of: 12 x 1kg

Altuglas S2000 Altuglas S2000 E Altuglas S2003 E

Available in outers of: 12 x 1kg

Altuglas Antistatic Cleaner Altuglas Cleaner

Available in outers of :

12 x 1 litre spray

6 x 5 litre containers

#### **GENERAL DATA**

Kits are available containing all the necessary equipment for easy mixing and application of the adhesives.

Acrylic that has been machined or formed can contain internal stresses. These must be relieved before bonding, otherwise crazing may occur on contact with the solvent in the adhesive.

This can be done by annealing the acrylic (refer to manufacturer's recommendations).

All surfaces to be bonded must be completely dry and clean. For best results use Atoglas cleaners.

To prevent applicator nozzles from becoming blocked and to avoid solvent evaporation, always replace lids or caps immediately after use.

Ensure threaded area is wiped clean before replacing cap.

All adhesives should be stored in a cool, dry, well ventilated place at 5 - 30°C. Unopened containers have a minimum shelf life of 12 months.

Material surrounding the joint can be protected during bonding with polypropylene tape. Pieces assembled prior to bonding can also be held in place with polypropylene tape.

#### TENSILE STRENGTH

Figures given are for information only and do not constitute a guarantee. Tensile strength was tested on butt jointed pieces.



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