

ALTUGLAS® ADHESIVE SPC

A highly fluid, transparent, single-component glue. This adhesive comprises a mixture of solvents and is specifically formulated for bonding Tuffak® polycarbonate, Altuglas® EX and Altuglas® EI sheets.

SPHERE OF APPLICATION:

Altuglas® Adhesive SPC has powerful solvent properties that penetrate deep into the surfaces of the components to be bonded, ensuring firm joints that are excellent in appearance.

Its high volatility makes the process very rapid and allows the assembly of multiple components in a very short space of time.

Being highly fluid, Altuglas® Adhesive SPC is easy to apply to the surfaces to be bonded, either from a syringe or polyethylene container fitted with an applicator tip (tube, needle or sponge).

It may be used on smooth or slightly roughened surfaces, but best results (visually and mechanically) are obtained with edges that have previously been leveled or finished with a diamond polisher.

TYPES OF JOINTS:

Edge-to-surface joints (boxes, dividers, embossed lettering for signs)

Edge-to-edge joints

Angled joints (display cabinets, boxes, containers)

All kinds of joints on small components.

PROPERTIES:

Color: clear

Density: 1.28 g/cm³

Flash point: closed vessel: 35°C

TOXICITY AND SAFETY

A number of special precautions are necessary when using Altuglas® Adhesive SPC:

Do not breathe the vapor

Work in a well-ventilated area

Avoid contact with the skin and eyes

As the product is inflammable, do not smoke when using the glue and keep away from flames.

PACKAGING

Altuglas® Adhesive SPC is supplied in boxes of 12 containers, each holding 1 kg, which must not be split.

For safety and corrosion reasons, the containers are made of aluminum.

Each package bears a label with safety information as required by law, as well as the batch number.

STORAGE PRECAUTIONS

Altuglas® Adhesive SPC must be stored in a cool dry place in the original containers, properly sealed, at a maximum temperature of 30°C.

The product may be stored for up to two years from the date of packing.

When using, draw off the quantity required and reseal the container.

GUIDELINES FOR USE

Releasing strains

To ensure optimum appearance and a joint that is solid and lasting, the components to be assembled must be free from internal strains caused by various operations (machining, bending, flame polishing, thermoforming or laser cutting). Such strains must therefore be released, otherwise cracking (crazing), by a pre-curing of the parts in an oven (see Altuglas® technical brochure).

TECHNICAL INFORMATION

Preparation of surfaces

Surfaces to be glued must be smooth or rubbed down. Sawn or milled edges must be as smooth as possible in appearance, best results being obtained after diamond polishing.

Areas adjacent to the bonding area may be protected with a special adhesive tape (e.g. made of polypropylene) that is resistant to glues. Where necessary, pre-assemble components using the same adhesive tape.

Applying the glue

Altuglas® Adhesive SPC is usually applied from a syringe fitted with a needle, or a container with a fine tube. The quantity of glue used must not be excessive, to prevent it squeezing out. Constant pressure must be used after applying the adhesive:

- for the first 15 to 20 seconds, with Tuffak® and Altuglas® EX
- for at least 1 minute, with Altuglas® EI

It is generally possible to handle the bonded pieces carefully after a few minutes and possibly to carry out other gluing operations. However, it is preferable to wait 24 hours before they undergo other manufacturing processes. The

bonded parts must not come into contact with solvents or aggressive substances such as alcohol, acids or dilute alkalis.

Properties of Altuglas® Adhesive SPC joints

Joints made with Altuglas® Adhesive SPC have good mechanical properties when made with extruded TUFFAK® polycarbonate and Altuglas® sheet. The greater solvent resistance of Altuglas® EI sheet slightly changes the performance of Altuglas® Adhesive SPC glue. Measurement of mechanical resistance to traction carried out after 4 days on test samples of Altuglas® EX and Tuffak®, glued edge-to-edge, gives a value of around 28 MPa.

This value is given solely as a guide and is not guaranteed in any way.

Altuglas® Adhesives have been developed exclusively for use with our Altuglas® products. All recommendations and guides to usage refer solely to Altuglas® products. Information contained in this sheet is derived from our research and experience. It is intended to serve as a guide when using our products and must not be considered as specification limits. We cannot be held responsible in any way, in particular as regards infringement of the rights of third parties.