

### **Plexiglas<sup>®</sup> Acrylic Molding Resin - Ethyl Acetate Dip Test**

Limited information about the quality of parts injection molded from Plexiglas<sup>®</sup> molding pellets can be obtained from the ethyl acetate dip test. This test is performed as follows:

Store the parts for several hours at room temperature following molding or annealing to insure that they are in thermal equilibrium at room temperature.

**Immerse the parts in 98% ethyl acetate for:**

- a) Two minutes if molded of Plexiglas<sup>®</sup> V825, V826, V045, V052 or V920.
- b) Fifteen seconds if molded of Plexiglas<sup>®</sup> VM, VS or VH.

Remove the parts from the ethyl acetate and allow to air-dry for 3 to 5 minutes.

If any fogging of the parts or deposit of a white coating is noted, wipe the parts carefully to remove any surface film.

**Examine the parts carefully for crazing or cracking.**

Cracking or crazing in the ethyl acetate dip test only shows the presence of relatively high surface tensile stresses on the part. Well-molded, unannealed parts or incompletely annealed parts may show no crazing by this test, yet may contain internal stresses which could be reduced by proper annealing. The ethyl acetate dip test cannot be used to evaluate the quality of flat sheet extruded from Plexiglas molding pellets.

Ethyl acetate is a flammable, volatile solvent that poses a slight health hazard. The OSHA Air Contaminant Standard for ethyl acetate is a time weighted average (TWA) of 400 ppm. Altuglas International recommends an exposure limit of 150 ppm. Skin and eye protection is indicated where direct contact with liquid is possible. The user is urged to obtain a Material Safety Data Sheet on ethyl acetate from his supplier.