Acrylic Cement

Advantages:
Fast setting
Good joint strength
Non-flammable
Water-thin

General Description:
SC-125 is used where you want a fast set up time. Strong joints are made using the soak method. When cementing acrylic in high humidity, SC-125 may leave white marks on the acrylic (called blushing). Solvent cementing depends on the intermingling of the two surfaces to be joined so that there is actual cohesion, as in the material itself. After assembly, the solvent evaporates or dissipates through the material and a hard clear joint is obtained. The choice of cementing technique will depend on the type of joint to be cemented.

Directions:
Preparation of the joint:
The surfaces to be cemented should fit accurately without forcing. In butt joints, for example, edges should be true and matched. Edges to be cemented should not be polished since polishing usually rounds corners and prevents the necessary square fit.

Cementing methods:
Soak method – one piece of the acrylic is actually immersed in the cement until the surface to be cemented softens into a “cushion”. The soak times may vary by room temperature. The “soak method” should not be used on extruded acrylic sheets or molded parts since these materials dissolve rather than soften.
Capillary method – Capillary cementing performs best when the parts are assembled in a jig. The cement is introduced into the joint by means of an eye dropper or syringe. The joining surfaces are held under light pressure until the joint sets.

Assembly:
When using the soak and dip method of cementing, the pieces should be assembled quickly before the cement on the surfaces of the “cushion” evaporates.

Jigs:
The success of a cementing job often depends on the design of the jig(s). The jig should keep the two parts firmly together, but should not force them out of shape. If the part is flexed of forced out of shape, local areas will be stressed and may cause crazing when brought in contact with the cement. The pressure should be great enough to (a) squeeze all air bubbles from the joint, (b) avoid stress concentrated at any one point, and (c) compensate for the shrinkage that takes place in the joint during setting or hardening. For most joints, a uniform pressure of approximately 1 psi has been found satisfactory.

Preliminary annealing:

Preliminary annealing before cementing will eliminate or reduce stresses present in machined or saw cut areas, which may result in crazing during application of cement. Annealing should be done less than 24 hours before cementing, if possible.

Note:

This information is based on test results believed to be accurate and reliable. This information is not to be considered a warrantee, expressed or implied, regarding the application and performance of this cement, since conditions of use are beyond our control.

For proper shipping, health, safety precautions, and disposal information, refer to the Material Safety Data Sheet on this product.