

ACRIFIX® MO 2080 Acrylic Cement Modifier

Product and Use

Proper cementing of acrylic sheet is a vital step in fabricating museum quality vitrines and display cases. ACRIFIX® MO 2080 Modifier was developed specifically to meet the need of high optical quality, two-component cement joints. When used with a two-component polymerization cement such as ACRIFIX® 2R 0190 or ACRIFIX® 2R 0195, cement joints become practically invisible.

Two-Component Cement

Two-component cement should be used when strength, resistance to environmental conditions, and high optical appearance is required. They also fill better and impose fewer demands on the accuracy of fit between the parts.

Two-component cement consists of polymers dissolved in monomers (Part A) which cure when a catalyst or hardener (Part B) is added. They are also referred to as two-part cement. The cure, or hardening of the cement mixture, is brought about by a chemical reaction. As a result of the chemical reaction the cement mixture shrinks and heats up as it cures. This can often result in the formation of bubbles or “pull back” of the cement from the edges of the joint. The proprietary formulation in ACRIFIX® MO 2080 eliminates or reduces these defects.

Workshop & Equipment

The following equipment and conditions should be considered when using polymerizable cement:

Flat Working Surface: Cover work area with glass or polyester film. Vapor removal is necessary. Solvent vapors are heavier than air.

Weighing Scale: The scale should have an accuracy of about one gram for weighing out the cement.

Mixing Vessels: Use round beakers made of glass, polyethylene, or other materials which are insoluble and do not swell.

Stirrer: Stir small amounts with glass or polyethylene insoluble rods.

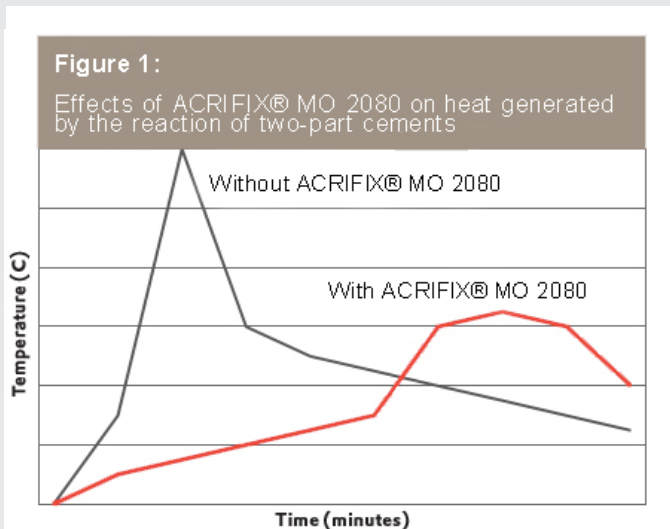
Vacuum Chamber: A small metal, glass, or plastic chamber that can hold a beaker cement and is capable of withstanding a vacuum of 3 psi.

Vacuum Pump: A small vacuum pump capable of evacuating the above chamber to a vacuum of 3 psi.

Syringes: Disposable syringes for applying the cement.

Jigs & Fixtures: For mass production, it is advisable to use gluing jigs which can be used repeatedly. Parts can be attached with clips, clamps, lead weights, or vacuum.

Sealing & Spacing: Use polyester tape to contain the cement.



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Mixing Procedure for ACRIFIX MO 2080 acrylic cement modifier

Follow instructions for the mixing ratios of the two-part cement. For 100 grams of ACRIFIX® 2R 0190 or ACRIFIX® 2R 0195 (Part A) and 5 grams of ACRIFIX® CA 0020 (Part B) add 0.12 grams (6 drops) of ACRIFIX® MO 2080. Adjust ratio for different size batches (example: Use 3 drops with 50 grams of "Part A" and 2.5 grams of "Part B").

In some cases a product like ACRIFIX® TC 0030 Thinner and Cleaner can be used to reduce the viscosity of the cement mixture to allow the material to flow into the joint better. The recommended amount of thinner is up to 10% by weight of the mixture. Fully stir the mixture for 1 to 2 minutes.

The mixture should be degassed using one of the following techniques before applying adhesive to the joint.

- Place it in a vacuum chamber for 3 to 5 minutes or until the bubbles have disappeared.
- Centrifuge the mixture for 3 to 5 minutes or until all the bubbles have disappeared.
- Allow entrapped air bubbles to rise to the surface in a covered container.

When the two-part cement is ready, apply the mixture to the joint. Wait for the material to be fully cured before attempting to move the acrylic. Premature movement of the acrylic can cause quality issues. ACRIFIX® MO 2080 may double the typical pot life from 20 minutes to 40 minutes.

Limitation of Liability

Our ACRIFIX® adhesives and other auxiliary agents were developed exclusively for use with our ACRYLITE® acrylic sheet products and are specially adjusted to the properties of these materials. Any recommendations and guidelines for workshop practice, therefore, refer exclusively to these products.

Seller's liability shall be limited to the purchase price of the product supplied (or to have been supplied) here-under in respect of which damages are claimed. All technical or other advice by seller, whether or not at buyer's request, with respect to the product, it's processing, further manufacture, other use or resale or otherwise, is given gratis by seller and seller shall not be liable for, and buyer assumes all risk of, such advice and the results thereof. SELLER SHALL IN NO EVENT BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, INCIDENTAL OR OTHER DAMAGES, AND REGARDLESS WHETHER THE CLAIM IS BASED ON WARRANTY, CONTRACT, TORT, STRICT LIABILITY, NEGLIGENCE OR OTHERWISE.

Upon satisfactory proof of claim by the buyer, and as buyer's exclusive remedy, the seller will, within a reasonable time, supply the buyer with a replacement product of the same or equivalent type, free of charge, freight prepaid or, at seller's option, refund the purchase price for the product upon return of the product or other delivered material, or the unused portion thereof. Buyer charges for replacements and returns for credit will not be allowed unless authorized by the seller in writing.

For further information on safety measures, the exclusion of health risks when handling adhesives and at their disposal, see our Safety Data Sheet.

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Röhm GmbH and its affiliates are a worldwide manufacturer of PMMA products sold under the PLEXIGLAS® trademark on the European, Asian, African and Australian continents and under the ACRYLITE® trademark in the Americas.

ACRIFIX® MO 2080 acrylic cement modifier - Patent Pending

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