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# Adelphi A-973

# **Room Temperature Curing Epoxy Adhesive**

Adelphi A-973 is a high performance modified acrylic structural adhesive for bonding a wide variety of metallic and non-metallic materials to themselves or to each other. Adelphi A-973 develops outstanding shear and peel properties exceeding the inherent strengths of many engineering thermoplastics.

	Viscosity	Color	Base	Wgt./Gal	Solids	Diluent	Shelf Life
ĺ	Thixotropic	Clear Yellow	Modified Acrylic	8.1 lbs	100%	Do not dilute	12 months

## **Choice of Catalyst**

Accelerator 4: Allows 'no-mix' application where the glue line is less than 10 mils. Accelerator 5: This two part system provides a faster cure, and a shorter pot life.

Catalyst No.	Mixing Ratio (by wt)	Properties	Pot Life @ 77° F	Avg Lap Shear
Accelerator 4	No mixing required	For easier application	None	3000 psi
Accelerator 5	100 PARTS 5 PARTS	For faster cure.	5 minutes (1 qt)	3000 psi

### **Surface Preparation:**

All bonding surfaces must be thoroughly cleaned, degreased and dried. For plastic surfaces, remove mold release if any.

#### **Preparation of Adhesive:**

Depending on the desired method of application, A-973 can be cured with Accelerator 4 or Accelerator 5. Always stir each part thoroughly, weigh accurately, and knead slowly to avoid entrapping air.

Mixed adhesive may be applied with trowel, spatula, knife, paint roller, brush, etc. Apply enough mixed adhesive to leave about 4-6 mils in the final glue line. This may be accomplished by coating 4-6 mils on one surface only or by coating 2-3 mils on each surface. If one surface is porous, more adhesive must be applied to fill the voids and yet produce a final glue line thickness of 4-6 mils.

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Precautions: Read SDS prior to handling. Although we believe the information shown is accurate, Adelphi Materials shall not be liable with respect to the application or use of any of the information. Adelphi Materials makes no warranties, express or implied, including but not limited to any implied warranty of marketability for a particular purpose with respect to any product.





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### **Cure Time**

# Cure With Accelerator 4 "NO MIX" SYSTEM:

(Not recommended where glue line thickness is greater than 10 mils and/or accelerated cure times are needed.)

Apply a thin, uniform coating of Accelerator 4 to both surfaces by spray, brush, or roller. Accelerator #4 dries in about 30 seconds. After the Accelerator 4 has dried it will appear as a white colored coating. Apply the Adelphi A-973to either part at any time within the next 4 hours. The parts should then be joined and allowed to remain in place for about 30 min. The parts can then be moved and handled safely. Full strength is achieved after 24 hrs.

# **Cure With Accelerator 5 TWO PART MIX SYSTEM:**

Add 5 parts by weight of Accelerator 5 to 100 parts of Adelphi A-973 and mix thoroughly (avoid excessive introduction of air bubbles). Because of the short pot life and cure time, (approx. 15 minutes) parts should be joined as soon as possible after mixing, and clean-up done at this time. Solvents such as toluene or acetone may be used for clean-up.

Bonds will continue to improve in strength at room temperature until optimum is reached, usually within 1-2 days.

Technical Questions? Call us. We are happy to help! +631-537-8390

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