



# SUPER INSTANT® EPOXY

## PRODUCT OVERVIEW

Smooth-On *Super Instant® Epoxy* is a two component, clear amber adhesive designed to provide rapid bonding. When mixed in equal proportions - either by volume or by weight - curing takes place quickly enough to permit handling in 5 to 10 minutes at room temperature. Super Instant® adheres to metals such as steel, aluminum and brass, to wood, glass, masonry and many hard plastics.

## TECHNICAL OVERVIEW

**Key Values:**      ~**Mixing Ratio:** 100 A: 100B by volume      ~ **Pot Life:** 2.5 minutes (1/4 pint)  
 ~**Sag Resistance:** N/A      ~**Color:** Clear Amber      ~**Barcol 935 Hardness:** 60

<u>Properties</u>	<u>Viscosity</u>	<u>G/CC</u>	<u>Elongation At Break</u>	<u>Tensile Strength</u>
A+B Mixed	1,100 cps	1.17	10+%	1100 psi
Modulus of Elasticity in Tension . . . . .	27,000		Compressive Yield Strength . . .	4,500 psi
Modulus of Elasticity in Compression . . .	115,000			

### *Adhesive Properties* (Tensile Shear Adhesion – ASTM D1002)

#### *Preparation Of Surfaces For Adhesive Bonding*

A clean, dry surface is a necessary prerequisite for adhesive bonding. Adhesives will stick to either the surface of which a bond is desired or to that film of extraneous material directly on that surface. Rarely can a structural adhesive penetrate through surface contaminants to provide an optimum bond on an unclean surface.

Porous materials are simple to bond, provided they are dry. The surface should be sanded till clean and free from dust.

<u>Substrate</u>	<u>Exposure</u>	<u>Test Temp.</u>	<u>Value(psi)</u>
AL 2024-T-3	None	-50C	2100
“	None	25C	2900
“	None	80C	300
“	30 days in tap water @25C	25C	1800
“	7 days in 100% RH @ 65C	25C	2300
Cold Rolled Steel	None	25C	4000

Non-porous surfaces, such as found on metal and plastic materials, should be degreased, dried and roughened by sanding, sandblasting or chemical etching. The etched or sandblasted surfaces should be covered within a few hours of treatment to prevent contamination. Handlers should wear clean cotton gloves to prevent body oils from contaminating the clean surfaces.

Materials should be stored and used in a warm environment (72° F / 22° C). This product has limited shelf life and should be used as soon as possible. Wear safety glasses, long sleeves and rubber gloves to minimize contamination risk. For maximum bond strength surfaces must be clean and free of any contamination. Non-porous surfaces should be abraded to increase effective surface area and then be wiped clean with a solvent. Epoxy adhesives do not perform well on metals such as nickel, chromium, tin or zinc nor on soft thermoplastics like polyethylene. Refer to the Preparation of Surfaces for Adhesive Bonding technical bulletin.

**Because no two applications are quite the same, a small test application to determine suitability for your project is recommended if performance of this material is in question.**

## ***Measuring and Mixing***

**Important:** Measure equal amounts of Parts A and B by weight or volume into a clean mixing container. Mixing tools and containers should be clean and made of metal, glass or plastic. After dispensing required amount of Parts A and B into mixing container, **mix quickly but thoroughly** for 1 minute making sure that you scrape the sides and bottom of the mixing container several times.

***Safety First!***

***Safety First!***

***Safety First!***

*The Material Safety Data Sheet (MSDS) for this or any Smooth-On product should be read prior to use and is available upon request from Smooth-On. All Smooth-On products are safe to use if directions are read and followed carefully.*

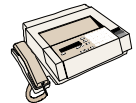
**Be Careful!** Super Instant® Epoxy Part-A is irritating to the eyes and skin. Avoid prolonged or repeated skin contact to prevent possible sensitization. Use only with adequate ventilation. If contaminated flush eyes with water for 15 minutes and seek medical attention. Remove from skin with waterless hand cleaner then soap and water. Refer to MSDS. Super Instant® Epoxy Part-B causes burns to the eyes. May burn the skin and cause sensitization. Vapors irritate the respiratory tract. If contaminated, flush eyes with water for 15 minutes and seek medical attention. Remove from skin with soap and water. Use only with adequate ventilation.

**Important!** The information contained in this bulletin is considered accurate. However, no warranty is expressed or implied regarding this accuracy, the results to be obtained from the use thereof, or that any such will not infringe a patent. User shall determine beforehand the suitability of this product for the intended application and assume all risk and liability in connection therewith.

**Smooth-On offers a complete line of Liquid Rubber and Liquid Plastic products for hundreds of industrial and art related applications.**



Feel free to call or fax us any time with your questions.



Chances are there is a distributor in your area to offer local support.

Toll-free: (800) 762-0744

Outside The U.S.: (610) 252-5800

Fax: (610) 252-6200

Or visit the Smooth-On Website at: [www.smooth-on.com](http://www.smooth-on.com)