

Super Instant®

Epoxy Adhesive



www.smooth-on.com

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. **Super Instant® Epoxy** will cure under water and is used for a variety of marine and aquarium repair applications.

TECHNICAL OVERVIEW

Mix Ratio: 1A : 1B by volume

Mixed Viscosity, Light-paste

Specific Gravity, g/cc: 1.17

Pot Life: 2.5 minutes (1/4 pint) (73°F/23°C)

Cure time: 10 minutes (73°F/23°C)

Color: Clear Amber

Barcol 935 Hardness: 60

Tensile Strength, psi: 1,100

Elongation @ Break: 10+%

Sag Resistance: N/A

Modulus of Elasticity in Tension, psi: 27,000

Modulus of Elasticity in Compression, psi: 115,000

Compressive Yield Strength, psi: 4,500

* All values measured after 7 days at 73°F/23°C

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. **Keep Out of Reach of Children**

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 the accuracy of the data, the results to be obtained from the use thereof, or that any such use will not infringe upon a patent. User shall determine the suitability of the product for the intended application and assume all risk and liability whatsoever in connection therewith.

PROCESSING RECOMMENDATIONS

PREPARATION...Safety - Use in a properly ventilated area ("room size" ventilation). Wear safety glasses, long sleeves and rubber gloves to minimize contamination risk.

Store and use material at room temperature (73°F/23°C). This product has a limited shelf life and should be used as soon as possible.

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. 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.**

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 & MIXING...

Measuring & Mixing - Squeeze out equal amounts onto a disposable surface and mix thoroughly. 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 thoroughly making sure that you scrape the sides and bottom of the mixing container several times.

ADHESIVE PROPERTIES

(Tensile Shear Adhesion - ASTM D1002)

Substrate	Exposure	Test Temp	Value, psi
AL 2024-T-3	None	-50°C	2100
AL 2024-T-3	None	25°C	2900
AL 2024-T-3	None	80°C	300
AL 2024-T-3	30 days in tap water @ 25°C	25°C	1800
AL 2024-T-3	7 days in 100% RH @ 65°C	25°C	2300
Cold Rolled Steel	None	25°C	4000



Call Us Anytime With Questions About Your Application.

Toll-free: (800) 381-1733 Fax: (610) 252-6200

The new www.smooth-on.com is loaded with information about mold making, casting and more. 083115 - JR