

**SG7706****Methacrylate Adhesive****DESCRIPTION**

SCIGRIP® SG7706 adhesive is a two-part methacrylate, structural rodding and clip bonding adhesive designed for the structural bonding of sink clips, steel and fiberglass rodding materials, and steel and aluminum to solid surface (acrylic and polyester), engineered stone, quartz surfaces, and natural stone products. Combined at a ratio of 1:1, SG7706 has a working time of 4 to 8 minutes and achieves nearly 90 percent of its ultimate strength in 10 to 15 minutes at room temperature curing. SG7706 provides high strength bonds to acrylic solid surface, polyester solid surface (both filled and unfilled), and solid surface (combinations of both acrylic and polyester solid surface resins) and the steel clips, rods, fiberglass and other materials. SG7706 has high strength bonds to carbon steel, stainless steel, and aluminum alloys. SG7706 is NOT UV STABLE, AND WILL YELLOW OVER TIME and must not be used to create imperceptible seams in countertops. However, this yellowing will not affect bond performance, but will affect bond appearance. SG7706 is available in 50 ml and 400 ml cartridges.

**TYPICAL ADHESIVE CHARACTERISTICS @ 75°F (24°C)**

Characteristics	Part A (Adhesive)	Part B (Activator)	Mix (Part A + B)
Color	Translucent	Amber	Amber
Mix ratio by volume	1	1	—
Mix ratio by weight	1	1	—
Density, g/cc	0.98	0.96	0.97
Density, lb/gallon	8.2	8.0	8.1
Viscosity, cps	30,000 – 50,000	70,000 – 100,00	—

**TYPICAL PHYSICAL PROPERTIES @ 75°F (24°C)**

Working Time	4 to 8 minutes	Operating Temperature	65°F to 85°F (18°C to 30°C)
Fixture Time	10 to 15 minutes	Gap Filling	.250 inches
Can Be Moved In	20 to 25 minutes	Flash Point	51°F (11°C) – See MSDS for more safety information

**MECHANICAL PROPERTIES**

Typical Lap Shear	Substrate	Results	Failure Type
Strength, psi	Acrylic Solid Surface	2,500 - 3,000	Cohesive
Strength, psi	Polyester Solid Surface	2,500 – 3,000	Substrate
Strength, psi	Steel/Stainless Steel	2,800 – 3,500	Cohesive
Strength, psi	Aluminum	2,000 – 2,500	Cohesive

**CHEMICAL RESISTANCE**

Excellent Resistance To:		Susceptible To:
✓ Hydrocarbons	✓ Wine and Condiments	✗ Polar Solvents
✓ Acids and Bases	✓ Most Household Foods	✗ Super Strong Acids and Bases
✓ Vinegar		

**NOTE:**

This product is intended for use by skilled individuals at their own risk. Recommendations contained herein are based on information we believe to be reliable. The properties and strength values presented above are typical properties obtained under controlled laboratory conditions. They are intended to be used only as a guide for selection. The ultimate suitability for any intended application must be verified by the end user under anticipated end-use conditions. Since specific use, materials and product handling are not controlled by SCIGRIP, our warranty is limited to the replacement of defective SCIGRIP product only.

#### HANDLING AND APPLICATION

SCIGRIP® SG7706 adhesive (Part A) and activator (Part B) are flammable. Contents include Methacrylate ester and acids. Keep containers closed after use. Wear gloves and safety glasses to avoid skin and eye contact. Wash with soap and water after skin contact. In case of eye contact, flush with water for 15 minutes and get medical attention. Harmful if swallowed. Keep out of the reach of children. Keep away from heat, sparks, and open flames. Do not smoke cigarettes or anything else while handling or near the product. Refer to the SG7706 Material Safety Data Sheet for more complete safety instruction. To assure maximum bond strength, surfaces must be mated together within the specified working time, and all clamps affixed within that time. Use sufficient material to ensure that the joint is completely filled when parts are mated and clamped. Avoid over clamping parts, which may cause a dry joint or a joint starved of adhesive. All adhesive application, part positioning, fixturing, and clamping should occur before the working time of the adhesive has expired. After the indicated working time, parts must remain undisturbed until the fixture time is completed. Components bonded, adhesive, and shop temperature can have a significant effect on the work and fixture time of the adhesive. Application of SG7706 adhesive at temperatures between 65°F and 85°F (18°C and 30°C) will ensure proper cure. Temperatures below 65°F (18°C) will slow cure and fixture speed. SG7706 adhesives will still react, but will take longer. Temperatures above 85°F (18°C and 30°C) will increase cure and fixture speeds, and there's a risk that the adhesive will be hardened or too thick to bond materials. The viscosities of SG7706 adhesives are affected by temperature.

**NOTE:** Because of the rapid curing features of SG7706 adhesives, large amounts of heat are generated when large masses of material are mixed at one time. The heat generated by the exotherm resulting from mixing large amounts of adhesive can result in a boiling of the monomer in the adhesive (methyl methacrylate), resulting in the release of trapped air, steam and volatile gasses. To prevent this, use only enough material as needed for use within the working time for the product, and confine the gap or spread out the material to no more than .250 inches.

#### SHELF LIFE & STORAGE CONDITIONS:

The shelf life of adhesive and activator in unopened containers is six (6) months from the date of shipment to you from IPS Adhesives unless otherwise explicitly stated. Shelf life is based on a continuous, steady state storage temperature of between 65°F (18°C) and 80°F (27°C). Exposure to temperatures below 65°F (18°C) or above 80°F (27°C) will impact the product performance and viscosity. Exposure to temperatures above 80°F (27°C) will rapidly reduce the stated shelf life of the product.

#### PRODUCT APPLICATION & USE:

To ensure consistent performance, product temperatures must be held reasonably constant between 65°F (18°C) and 80°F (27°C). Substrate preparation, adhesive/activator ratio, application temperature, humidity and a variety of other environmental and end user application factors are beyond the control of IPS Adhesives; therefore, the end user is solely responsible for determining whether the product is fit for a specific purpose and suitable for the user's product, design and final application requirements.

#### IMPORTANT NOTES

- SUBSTRATE AND APPLICATION COMPATIBILITY.** The user must determine the suitability of a selected adhesive for a given substrate and application. SCIGRIP strongly recommends laboratory, shop and end-use testing that simulates the actual manufacturing and end-use environment.
- SURFACE PREPARATION.** The need for surface preparation must be determined by comparative testing of prepared and unprepared substrates to assure that unprepared bonding is equivalent to or acceptable for the application relative to prepared bonding. Initial bonding tests must be followed up with simulated or actual durability tests to assure that surface conditions do not lead to degradation of the bond over time under service conditions. Subsequent changes in substrates or bonding conditions will require re-testing.
- TECHNICAL ASSISTANCE.** Contact your SCIGRIP representative for questions or assistance with the selection of adhesives and methods for evaluating adhesives for your intended application.

**NOTE:** *This product is intended for use by skilled individuals at their own risk. Recommendations contained herein are based on information we believe to be reliable. The properties and strength values presented above are typical properties obtained under controlled conditions at the SCIGRIP laboratory. They are intended to be used only as a guide for selection for end-use evaluation. The ultimate suitability for any intended application must be verified by the end user under anticipated test conditions. Since specific use, materials and product handling are not controlled by SCIGRIP, our warranty is limited to the replacement of defective SCIGRIP products.*

**Limited Warranty:** Seller warrants to the original Buyer of the goods that all new Seller goods shall be free from defects in material and workmanship for the published shelf life of the good. If any Seller good fails to conform to this Limited Warranty under normal use and storage conditions, and if the original Buyer complies with the terms of this Limited Warranty, then Seller will, without charge to Buyer, replace the nonconforming good.

This Limited Warranty shall not extend to, nor shall Seller be responsible for, damages or loss resulting from accident, misuse, negligent use, improper storage, or improper application.

**THIS LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES. SELLER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, AND EXPRESSLY DISCLAIMS ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, ARISING FROM A COURSE OF DEALINGS, AND/OR FROM USAGE OF TRADE.**

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