

SUBSTRATE RECOMMENDATIONS

SCIGRIP® 42 is especially formulated to bond acrylic, including extruded cell cast and continuous cast, as well as, molded parts and some cross-linked sheet. It will also bond acrylic to polyester, cellulose acetate butyrate, polycarbonate and other materials.

BONDING RECOMMENDATIONS

SCIGRIP 42 is recommended for bonding of acrylic plastics especially where good clarity retention is required. It is versatile having many applications in the sign industry and in the manufacturing and repair of aquariums, museum quality cases and other plastics fabrication industries.

GENERAL DESCRIPTION

SCIGRIP 42 is a two-component, clear, medium bodied, reactive acrylic adhesive. It polymerizes by the reaction of Component A (Base Resin) with Component B (catalyst). SCIGRIP 42 is packaged in 10:1, 50 ml and 230 ml cartridges for use with a two-component dispensing gun and static mixing tip. The adhesive is mixed as it passes through the mixer tip. The mixed product polymerizes at room temperature; joints are usually hard enough for handling in about 4 hours at 70°F (21°C). Machining may be done after 24 hours. This product meets Military Spec A-8576C Type III.

TYPICAL BOND STRENGTH[†]

Temperature	Aged Bond Strength, lbs/in ² (kg/cm ²)	
	24 Hours	1 Week
Room temperature	2600 (182.8)	4000 (281.0)
120°F (49°C)	4500 (316.0)	5700 (401.8)
150°F (66°C)	5900 (414.8)	7000 (492.0)

[†]Substrate thickness: 0.25 inch (0.64 cm). Bond area: 1.0 in² (6.45 cm²)

ADHESIVE PROPERTIES AND CHARACTERISTICS @ 73°F (23°C)

COLOR:	Clear	FIXTURE TIME:	2 Hours
VISCOSITY:	2900 ± 150 cps	TIME TO REACH 80% OF ULTIMATE BOND STRENGTH:	72 Hours
REACTIVITY:	20 Minutes	SPECIFIC GRAVITY:	Component A: 1.026 ± 0.01
WORKING TIME:	15 Minutes		Component B: 1.164 ± 0.004

DIRECTIONS FOR USE

- Always wear safety glasses and disposable polyethylene gloves.
- Load cartridge into adhesive dispenser and remove nose plugs from the cartridge by unscrewing the retaining nut.
- Dispense a small amount of the resin and catalyst from the cartridge by depressing the trigger. Make sure both materials flow freely from the cartridge, checking for any blockages. Place the mixer tip on the cartridge and secure the remaining nut. Discard the first 6-12 inches of the material and proceed.
- IF THE MATERIAL IS NOT COMPLETELY USED WITH ONE APPLICATION, IT CAN BE PRESERVED. Leave the mixer tip in place and its presence will temporarily reseal the cartridge. To restore the cartridge to its original state, remove the used mixer tip, clean the threaded areas thoroughly ensuring there is NO crossover of the two components. Remove any blockages that may have formed in the nose area. DO NOT FORCE BLOCKAGES BACK INTO THE CARTRIDGES.
- Always use a new mixer tip. Never attempt to force material through a blocked opening or a used mixer tip. Discard the first 6-12 inches of material whenever a new tip is used.

AVAILABILITY

This product is available in 50 ml and 230 ml cartridges. For detailed information on containers and applicators, refer to the current Assembly Adhesive Selection Guide and Price List.

SHELF LIFE

Keep away from sources of heat, open flame, sparks and sunlight. Storage near the ceiling in a warehouse (without air-conditioner) is not recommended. One year shelf life is expected when stored in a cool 50° – 80°F (10° – 27°C) dry place.

QUALITY ASSURANCE

SCIGRIP 42 is carefully evaluated to assure that consistent high quality is maintained. Fourier transform infrared spectroscopy, gas chromatography, and additional in depth testing ensures each batch is manufactured to exacting standards. A batch identification code is stamped on each can and assures traceability of all materials and processes encountered in manufacturing this plastic adhesive for its intended specific application.

SHIPPING

Shipping Information for One Liter Kit and Above: Proper Shipping Name: Adhesive. Hazard Class: 3. Identification Number: UN 1133. Packing Group: II. Label Required: Flammable Liquid. **For Less than One Liter:** Proper Shipping Name: Consumer Commodity. Hazard Class: ORM-D.

SAFETY AND ENVIRONMENTAL PRECAUTIONS

This product is a flammable, reactive adhesive. It is considered a hazardous material. In conformance with the Federal Hazardous Substance Labeling Act, the following hazards and precautions are given. Purchasers who may re-package this product must also conform to all local, state, and federal labeling, safety and other regulations. VOC emissions do not exceed 75 grams per liter.

**WARNING! FLAMMABLE. VAPOR HARMFUL.
MAY BE HARMFUL IF SWALLOWED. MAY IRRITATE SKIN OR EYES.**

Keep out of reach of children. Do not take internally. Keep away from heat, spark, open flame and other sources of ignition. Keep container closed when not in use. Store away from direct sunlight in a cool 50° – 80°F (10° – 27° C) dry place. Use only in well ventilated area. Avoid breathing of vapors. Atmospheric levels should be maintained below established exposure limit values contained in Section II and VIII of Material Safety Data Sheet. If airborne concentrations exceed those limits, use of a NIOSH-approved organic vapor cartridge respirator with full face piece is recommended. The effectiveness of an air-purifying respirator is limited. Use it only for a single short term exposure. For emergency and other conditions where short-term exposure guidelines may be exceeded, use an approved positive pressure self-contained breathing apparatus. Do not smoke, eat or drink while working with this product. Avoid contact with skin, eyes and clothing. May cause eye injury. Protective equipment such as gloves, goggles and impervious apron should be used. Carefully read Material Safety Data Sheet and follow all precautions.

Contains Methyl Methacrylate Monomer (80-62-6). Do not use this product for other than intended use.

“Title III Section 313 Supplier Notification:” This product contains toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40CFR372. This information must be included in all Material Safety Data Sheets that are copied and distributed for this material.

FIRST AID

Inhalation: If overcome with vapors, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call physician.

Eye Contact: Flush with plenty of water for 15 minutes and call a physician.

Skin Contact: Wash skin with plenty of soap and water for at least 15 minutes. If irritation develops, get medical attention.

Ingestion: If swallowed, give 1 or 2 glasses of water or milk. Do not induce vomiting. Contact physician or poison control center immediately

IMPORTANT NOTE

This product is intended for use by skilled individuals at their own risk. These suggestions and data are based on information we believe to be reliable. Users should verify by test that this product, as well as these methods, is suited to their application.

WARRANTY

IPS Corporation (IPS Corp.) warrants that all new IPS Corp. products shall be of good quality and free from defects in material and workmanship for the shelf life as indicated on the product. If any IPS Corp. product becomes defective, or fails to conform to our written limited warranty under normal use and storage conditions, then IPS Corp. will, without charge, replace the nonconforming product. However, this limited warranty shall not extend to, nor shall IPS Corp. be responsible for, damages or loss resulting from accident, misuse, negligent use, improper application, or incorporation of IPS Corp. products into other products. In addition, any repackaging of IPS Corp. products also shall void the limited warranty. IPS Corp. shall not be responsible for, nor does this limited warranty extend to, consequential damage, or incidental damage or expense, including without limitation, injury to persons or property or loss of use. Please refer to our standard IPS Corp. Limited Warranty for additional provisions.