SCIGRIP® ADHESIVES

Strong, lightweight structural adhesives for whatever you're putting together...

SCIGRIP 46C: A High Strength Structural Adhesive that Cures Optically Clear

- Formulated for assembly and fabrication applications that require clear bond lines with no read through

SCIGRIP 46C is a two-component, clear, thixotropic, reactive acrylic adhesive for bonding primer-less aluminum or other metals and acrylics. Its characteristics make it an excellent choice for sign assembly and other fabrication or manufacturing uses where no sagging, short fixture times, and good clarity retention are required.

Performance Benefits

FEATURE	BENEFIT
Cures optically clear	Allows creation of bond lines with no read through
Short working and fixture times	Less waiting when assembling multi-stage projects
Primer-less metal bonding[3]	Solvent cleaning only required on most metals
No-sag application	Reduced slide or sag even on inverted surfaces
High bond strength	Up to 2,200 lbs/in² after 24 hours (Aluminum)

Industry Spotlight

SIGN & DISPLAY + OTHER MANUFACTURING MARKETS

SCIGRIP 46C's strong clear adhesive is a game changer when it comes to bonding Acrylic to aluminium or Acrylic to Acrylic and polycarbonate to polycarbonate. It cures optically clear, with no bond lines and it reduces finishing time to ensure a flawless finish.

Additional Resources

- Technical questions? Use the **Ask SCIGRIP** feature at SCIGRIP.com
- **Find a distributor** at scigrip.com/scigrip-uk-distributors/
- **Get more info or request a demo** at assemblyadhesives.com/contact-us

NOTES:
1. Part A: Brookfield HB, T-A 10rpm. Part B: Brookfield LV, #63 30rpm
2. Test Methods Used: ASTM D1002, D3163, D5868
3. Lap sheer strength of obtained following ASTM D1002 method with metal substrates prepared by cleaning with isopropyl alcohol

TECHNICAL DATA SHEET

SCIGRIP 46C

CLEAR ACRYLIC ADHESIVE

RECOMMENDED FOR BONDING

Formulated for bonding a variety of metals and plastics.

PRODUCT PROPERTIES (In Minutes)

Cartridge	Adhesive	Activator	Working Time	Fixture Time
SG46C	SG46CA	SG46CB	6 - 9	15 - 25

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

SCIGRIP 46C *Uncured*	Part A *Adhesive*	Part B *Activator*	A+B *Mix*
Color	Off White	Translucent	Cures Clear
Mix ratio/volume	10	1	-
Mix ratio/weight	8.5	1	-
Density, g/cc	0.99	1.17	0.96
Density, lb/gallon	8.25	9.73	8.38
Viscosity, cps[1]	75,000 - 125,000	2,500 - 4,500	-

TYPICAL BOND STRENGTH @75°F (24°C)

Substrate	Aged Bond Strength, lbs/in² (MPA) *24 Hours*	*Failure Mode*
Aluminum	2,200 (15.2)	Thin Layer Cohesive
Cold Rolled Steel	2,200 (15.2)	Cohesive
Stainless Steel	1,900 (13.1)	Thin Layer Cohesive
Acrylic	800 (5.5)	Substrate Break
Polycarbonate	750 (5.2)	Substrate Break
PVC	600 (4.1)	Substrate Break
VEFRP	1,800 (12.4)	Fiber Tear
Aluminum *to* Acrylic	800 (5.5)	Substrate Break (Acrylic)
Cold Rolled Steel *to* Acrylic	800 (5.5)	Substrate Break (Acrylic)
Polycarbonate *to* Acrylic	800 (5.5)	Substrate Break (Acrylic)

PACKAGING & AVAILABILITY

Cartridges *50 ML*

Cartridges *490 ML*

Also Available

- Dispensing Guns
- Mixing Tips

a brand of IPS ADHESIVES

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SCIGRIP ADHESIVES

SCIGRIP 46C

Safety & Handling

DIRECTIONS FOR USE

SCIGRIP 46C is packaged in a twin-syringe cartridge that dispenses product in a 10:1 mix ratio. The cartridge must be inserted in the dispensing gun and the mixing tip attached prior to dispensing.

- Before inserting the cartridge in the dispensing gun, open cartridge valve and clean obstructions from cartridge nose and valve opening with a clean probe. Close valve.
- Insert cartridge into dispensing gun. Open valve. Dispense a small amount of adhesive making sure that both components freely flow from the cartridge.
- Attach the mixing tip to the cartridge. Press the dispensing gun to dispense and discard approximately 1 – 2 inches (2.5 – 5.0 cm) of the product, ensuring that the product is mixed properly in the mixing tip before use. If the mixing tip is left on the cartridge for a sufficient length of time without additional use, the adhesive may cure in the tip. If this happens, keep the mixing tip on the cartridge. When you are ready to dispense more adhesive, replace the mixing tip on the cartridge with a new one. Be sure to discard 1 – 2 inches (2.5 – 5.0 cm) of the product before use.

QUALITY ASSURANCE

SG46C is carefully evaluated to assure that consistent high quality is maintained . 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.

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. 9 months shelf life can be expected when stored in a cool 50° – 80°F (10° – 27°C) dry place.

SHIPPING

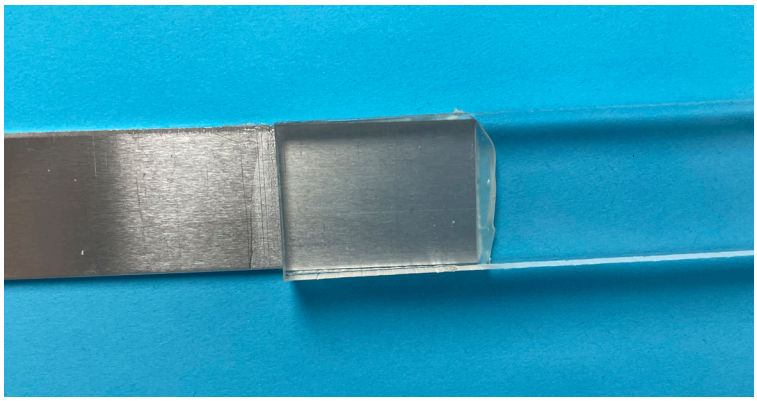
Proper Shipping Name: Flammable, corrosive, n.o.s. Hazard Class: 3. Identification Number: UN 2924. Packing Group: II. Label Required: Flammable, corrosive Liquid.

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 50º – 80ºF (10º – 27º 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.



SCIGRIP 46C shown bonding plastic to metal, curing optically clear.

Contains Methyl Methacrylate; 2-methyl propenoic acid. 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

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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