

SUBSTRATE RECOMMENDATIONS

SCIGRIP® 4807 is formulated to form high strength bonds in joining general purpose and high impact types of styrene.

BONDING RECOMMENDATIONS

SCIGRIP 4807 is recommended as a general usage for styrene where a bodied cement is desired. It is suitable for a wide variety of applications. It may be used on both large and small assemblies, large displays, signs, lighting fixtures, housewares, large and small containers, toys, electrical or electronic assemblies, decorator items, etc.

GENERAL DESCRIPTION

SCIGRIP 4807 is a milky, medium bodied, fast drying solvent type cement. It forms high strength bonds in joining general purpose and high impact types of styrene. It forms a high strength, rigid bond. Chemical, physical, and electrical properties are similar to those of high impact styrene. Cure is affected by dissipation of the solvent from the cement and surrounding parts softened by it. Initial bond will usually take place within minutes and may be of sufficient strength for handling. Bond strength will be considerable in a few hours and will reach high strength in 24 to 72 hours. Thereafter, strength will continue to increase gradually for some weeks.

TYPICAL BOND STRENGTH[†]

Substrate Material	Aged Bond Strength, lbs/in ² (kg/cm ²)		
	2 Hours	24 Hours	1 Week
ABS	300	1000	1800

[†]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:	Milky	TIME TO REACH 80% OF ULTIMATE BOND STRENGTH:	72 Hours
VISCOSITY:	600 ± 50 cps	SPECIFIC GRAVITY:	0.880 ± 0.01
WORKING TIME:	10 – 15 Minutes	COVERAGE:	10 mil: 32 sq ft/pint 260 sq ft/gallon
FIXTURE TIME:	20 Minutes		20 mil: 16 sq ft/pint 130 sq ft/gallon

DIRECTIONS FOR USE

JOINT PREPARATION: Parts to be joined should fit without forcing. Surfaces should be clean and smooth. A good machine finish or sanding with 200-400 grit sandpaper should be satisfactory. Surfaces “as molded or extruded” should not require additional preparation.

APPLICATION OF CEMENT: SCIGRIP 4807 can be applied by brush, spray, roller coating, pump-type oil cans, polyethylene squeeze bottles and other devices. Cement may be applied to one or both surfaces.

ASSEMBLY OF PARTS: Assemble while parts are still wet. If cement is applied to one surface, let the two surfaces be in gentle contact for a few seconds to allow the cement to soften the dry surface. Then press parts together in firm contact. If both of the parts have been coated, they may be brought firmly together immediately. The application of pressure of 2 to 10 lbs per square inch should materially increase bond strength. Spring-loaded clothespins may be very suitable as clamps. The length of time required for clamp or jig pressure will vary. A few hours or more may be needed for difficult joints, but only a few minutes for parts that fit well and have modest load requirements.

AVAILABILITY

This product is available in gallon (3.785 liters) metal cans. For detailed information on containers and applicators, refer to the current Assembly Adhesive Selection Guide and Price List.

SHELF LIFE

Three years expectancy in tightly sealed containers. Stability of the product is limited by the permanence of the container and the evaporation of the solvent when the container is open. Evaporation of solvent will cause the cement to thicken and reduce its effectiveness.

QUALITY ASSURANCE

SCIGRIP 4807 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 cement for its intended specific application.

SHIPPING

Shipping Information for Individual Container Larger than One Liter: DOT Shipping Name: Adhesive. DOT Hazard Class: 3. ID #: UN1133. Packaging Group: II. Label: Flammable Liquid. **For Less than One Liter:** DOT Shipping Name: Consumer Commodity. DOT Shipping Class: ORM-D.

SAFETY AND ENVIRONMENTAL PRECAUTIONS

This product is a flammable solvent cement. 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 400 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 between 40° – 110°F (5° – 43°C). Use only with adequate ventilation. Avoid breathing of vapors. Atmospheric levels should be maintained below established exposure limit values contained in Section II 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 Sheets and follow all precautions.

Contains Methyl Ethyl Ketone (78-93-3) and Polystyrene Resin (9003-53-6). 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, do not induce vomiting. Contact physician 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.

