

### SUBSTRATE RECOMMENDATIONS

SCIGRIP® 2354 is formulated for bonding ABS, styrene (general purpose high impact), acrylics and polycarbonates to themselves. It should not be used for joining dissimilar materials such as: ABS to styrene, ABS to acrylics, ABS to PVC or PVC to styrene.

### BONDING RECOMMENDATIONS

SCIGRIP 2354 is recommended for joining ABS, styrene and acrylics to themselves where a water-thin cement is desired. It is suitable and used on both large assemblies and small delicate assemblies. These include a wide variety of items: signs, large displays, lighting fixtures, housewares, electrical assemblies, decorator items and many other fabrications.

### GENERAL DESCRIPTION

SCIGRIP is a clear, water-thin, fast drying solvent cement. It may be applied by brush, syringe, spray, and most any other method. It forms bonds by the softening and fusion of the two surfaces in contact. Cure is affected by dissipation of the solvent and cures rapidly. Initial bonds take place within a few minutes and is often of sufficient strength to permit handling of the bonded item. Relatively high strength is reached in 24 to 48 hours, and continues to increase for a number of weeks. The joined material will generally have the same rigidity or flexibility and other physical properties as prior to bonding.

### TYPICAL BOND STRENGTH†

Substrate Material	Aged Bond Strength, lbs/in <sup>2</sup> (kg/cm <sup>2</sup> )		
	2 Hours	24 Hours	1 Week
ABS	500	1000	1230
Polycarbonate	1000	1800	2200
Styrene	500	1300	1800

†Substrate thickness: 0.25 inch (0.64 cm). Bond area: 1.0 in<sup>2</sup> (6.45 cm<sup>2</sup>)

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

COLOR:	Clear	80% STRENGTH:	72 Hours
VISCOSITY:	Water Thin	SPECIFIC GRAVITY:	0.805 ± 0.01
WORKING TIME:	3 Minutes	COVERAGE:	Unknown, no way to determine
FIXTURE TIME:	5 Minutes		

### 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” may not require additional preparation.

**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 pounds 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 may be required for difficult joints and a few minutes for parts that fit well and have modest load requirements.

**CAPILLARY METHOD:** Parts are placed lightly together and cement is applied to the edge of the joint with brush, eyedropper, or syringe. By capillary action, the cement will flow a considerable distance between two such surfaces. After a few seconds are allowed for the cement to soften the surfaces, the parts may be pressed together firmly. Where surfaces are very smooth and fit well together, it is sometimes possible to obtain good joints without additional clamping pressure. However, it may be best in most cases to maintain clamp pressure as outlined above.

**APPLICATION OF CEMENT:** SCIGRIP 2354 can be applied by brush, spray, pump type oil cans, syringe, eye dropper, saturated felt pad and other devices.

### AVAILABILITY

This product is available in gallon (3.785 liters) and pint (473 ml) 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 container is open.

## QUALITY ASSURANCE

SCIGRIP 2354 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 Containers Larger than One Liter:** DOT Shipping Name: Methyl Ethyl Ketone. DOT Hazard Class: 3. ID #: UN1193. Packaging Group: II. Label: Flammable Liquid.

**Shipping Information for Less than One Liter:** DOT Shipping Name: Consumer Commodity. DOT Shipping Class: ORM-D.

## SAFETY AND ENVIRONMENTAL PRECAUTIONS

This product is a flammable, fast evaporating, solvent cement. It is considered a hazardous material. In conformance with the Federal Hazardous Substances 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.

**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 and VIII of the 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, safety goggles and impervious apron should be used. Carefully read Material Safety Data Sheet and follow all precautions.

Contains Methyl Ethyl Ketone (78-93-3). 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.