



GHS SAFETY DATA SHEET

SCIGRIP® 40 2-Component Low VOC Adhesive (20:1 Mix Ratio)

Date Revised: MAR 2015
Supersedes: DEC 2014

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SCIGRIP® 40 2-Component Low VOC Adhesive (20:1 Mix Ratio)
PRODUCT USE: 2-Component Adhesive for bonding thermoplastics, metals and other composites
SUPPLIER: SCIGRIP Adhesives Ltd
 Unit 22, Bentall Business Park, Glover Rd
 Washington, Tyne&Wear, NE37 3JD, UK
 Tel +44 191 419 6444
MANUFACTURER: IPS Corporation
 600 Ellis Road, Durham, NC 27703 - USA
 P.O. Box 12729, Research Triangle Park, NC 27709 - USA
 Tel. 1-919-598-2400
EMERGENCY: Transportation: CHEMTEL Tel. 800-255-3924, +1 813-248-0585 (International) **Medical:** CHEMTEL Tel. 800-255-3924, +1 813-248-0585 (International)

SECTION 2 - HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

| Health | | Environmental | | Physical | |
|---------------------|------------|-------------------|------------|-------------------|------------|
| Acute Toxicity: | Category 4 | Acute Toxicity: | Category 3 | Flammable Liquid: | Category 2 |
| Skin Irritation: | Category 2 | Chronic Toxicity: | Category 4 | | |
| Skin Sensitization: | Category 1 | | | | |
| Eye: | Category 2 | | | | |

GHS LABEL:



Signal Word:
Danger

WHMIS CLASSIFICATION: CLASS B, DIVISION 2
CONTROLLED PRODUCT CLASS D, DIVISION 2B

| Hazard Statements | | Precautionary Statements | |
|--|--|--------------------------------------|---|
| H225 - Highly flammable liquid and vapor | H317 - May cause an allergic skin reaction | P233 - Keep container tightly closed | P262: Do not get in eyes, on skin, or on clothing |
| H312 - Harmful in contact with skin | H335 - May cause respiratory irritation | P260 - Do not breathe vapor | P271 - Use only outdoors or in a well-ventilated area |
| H315 - Causes skin irritation | | | |

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS# | EINECS # | REACH Pre-registration Number | CONCENTRATION % by Weight |
|---|---------|-----------|----------------------------------|------------------------------|
| Component "A" (Base Resin) | | | | |
| Methyl Methacrylate Monomer (MMA)* Stabilized | 80-62-6 | 201-297-1 | 05-2116297731-37-0000 | 60 - 70 |
| Component "B" (Catalyst-Initiator) | | | | |
| Benzoyl Peroxide (BPO)* | 94-36-0 | 202-327-6 | 05-2116297715-31-0000 | 1 - 10 |

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.
 *Indicates this chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372).
 # indicates that this chemical is found on Proposition 65's List of chemicals known to the State of California to cause cancer or reproductive toxicity.

SECTION 4 - FIRST AID MEASURES

Contact with eyes: Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.
Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.
Inhalation: Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.
Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.
Likely Routes of Exposure: Inhalation, Eye and Skin Contact
Acute symptoms and effects:
Inhalation: Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages.
Eye Contact: Vapors slightly uncomfortable. Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid.
Skin Contact: Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.
Ingestion: May cause nausea, vomiting, diarrhea and mental sluggishness.
Chronic (long-term) effects: None known to humans

SECTION 5 - FIREFIGHTING MEASURES

Suitable Extinguishing Media: Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.
Unsuitable Extinguishing Media: Water spray or stream.
Exposure Hazards: Inhalation and dermal contact
Combustion Products: Oxides of carbon, oxides of nitrogen, hydrogen chloride hydrocarbons, acrid smoke and gases.
Protection for Firefighters: Self-contained breathing apparatus or full-face positive pressure air-supply masks.

| | Health | Flammability | Reactivity | HMS | NFPA | |
|--|--------|--------------|------------|-----|------|------------|
| | 2 | 3 | 2 | | 2 | 0-Minimal |
| | | | | | 3 | 1-Slight |
| | | | | | 2 | 2-Moderate |
| | | | | | 3 | 3-Serious |
| | | | | | 4 | 4-Severe |

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions: Keep away from heat, sparks and open flame.
 Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment.
 Prevent contact with skin or eyes (see section 8).
Environmental Precautions: Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.
Methods for Cleaning up: Contain spill with sand or other inert adsorbent or absorbent material. Use non-sparking tools.
 Transfer to a closable vessel (Metal or polyethylene [PE])

SECTION 7 - HANDLING AND STORAGE

Handling: Avoid breathing of vapor, avoid contact with eyes, skin and clothing.
 Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods.
 Do not eat, drink or smoke while handling.
Storage: Store between 50° - 80°F (10° - 27°C). Store in ventilated room or shade away from direct sunlight. Keep container tightly closed when not in use.
 Keep away from ignition sources and incompatible materials. Follow all precautionary information on container label and product bulletins.

SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

| EXPOSURE LIMITS: | Component | ACGIH TLV | ACGIH STEL | OSHA PEL | OSHA STEL |
|------------------|--------------------------|---------------------|------------|---------------------|-----------|
| | Methyl Methacrylate Mon. | 50 ppm | 100 ppm | 100 ppm | N/E |
| | Benzoyl Peroxide | 5 mg/m ³ | N/E | 5 mg/m ³ | N/E |

Engineering Controls: Use local exhaust as needed.
Monitoring: Maintain breathing zone airborne concentrations below exposure limits.
Personal Protective Equipment (PPE):
Eye Protection: Avoid contact with eyes, wear splashproof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields.
Skin Protection: Prevent contact with the skin as much as possible. Butyl rubber gloves should be used for frequent immersion.
 Use of solvent-resistant gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application practices and procedures are used for making structural bonds.
Respiratory Protection: Use in a well-ventilated room. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above. With normal use, the Exposure Limit Value will not usually be reached.
 When limits approached, use respiratory protection equipment.



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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|-----------------------------------|---|-------------------------------|---|
| Appearance: | "A" - Clear, heavy viscous liquid, "B" - Clear low viscosity liquid | Odor Threshold: | "A" 0.75 ppm: MMA, "B" Slight |
| Odor: | "A" - Strong Solvent Odor, "B" - Mild | Active Oxygen Content: | <1 % |
| pH: | Not Applicable | Evaporation Rate: | "A" - > 1.0, "B" - <1 (BUAC = 1) |
| Boiling Point: | "A" 100.5°C (212.9°F) Based on first boiling component: MMA "B" Decomposes | Flammability: | "A" - Category 2, "B" - Category 4 |
| Flash Point: | "A" 11.5°C (52.7°F) T.C.C. based on MMA, "B" 84°C (184°F) for BPO | Flammability Limits: | LEL: "A" - 1.6% based on MMA UEL: "A" - 12.5% based on MMA |
| Specific Gravity: | "A" 1.026 @23°C (73°F) "B" 1.160 @23°C (73°F) | Vapor Pressure: | "A" 29 mm Hg @ 20°C (68°F): MMA |
| Solubility: | "A" - Slight in Water (MMA, MAA), "B" - Insoluble in Water | Vapor Density: | "A" - >3 (Air = 1), "B" - N/E |
| Auto-ignition Temperature: | "A" 421°C (789.8°F): MMA, "B": Not Established | | |
| Decomposition Temperature: | "A" - Not Applicable, "B" - 110°C (230°F) | | |
| VOC Content: | "A" - ≤ 50 g/l mixed, "B" - None | | |

SECTION 10 - STABILITY AND REACTIVITY

| | |
|--|---|
| Stability: | Stable, unless heated |
| Hazardous decomposition products: | None in normal use. Oxides of carbon, oxides of nitrogen, hydrogen chloride, hydrocarbons, acrid smoke and gases upon combustion. |
| Conditions to avoid: | Keep away from direct sunlight, heat, sparks, open flame and other ignition sources. |
| Incompatible Materials: | Reducing and oxidizing agents and metal contaminants |

SECTION 11 - TOXICOLOGICAL INFORMATION

| | | | |
|-----------------------------------|---|-----------------------------------|----------------------|
| Toxicity: | LD50 | LC50 | Target Organs |
| Methyl Methacrylate Monomer (MMA) | Oral: 7900 mg/kg (rat), Dermal: >35000 mg/kg (rabbit) | Inhalation: 3 hrs. 7093 PPM (rat) | STOT SE3 |
| Benzoyl Peroxide | Oral: 6400 mg/kg (rat) | Oral: 2 mg/l 96 hours (guppy) | |

| Reproductive Effects | Teratogenicity | Mutagenicity | Embryotoxicity | Sensitization to Product | Synergistic Products |
|----------------------|-----------------|-----------------|-----------------|--------------------------|----------------------|
| Not Established | Not Established | Not Established | Not Established | Not Established | Not Established |

SECTION 12 - ECOLOGICAL INFORMATION

| | |
|-------------------------|--|
| Ecotoxicity: | None known |
| Mobility: | In normal use, emission of volatile organic compounds (VOC's) to the air takes place, typically at a rate of ≤50 g/l |
| Degradability: | Not Established |
| Bioaccumulation: | Not Established |

SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Follow local and national regulations. Consult local disposal expert.

SECTION 14 - TRANSPORT INFORMATION

| | |
|-------------------------------|--------------------------|
| Proper Shipping Name: | Adhesives |
| Hazard Class: | 3 |
| Secondary Risk: | None |
| Identification Number: | UN 1133 |
| Packing Group: | PG II |
| Label Required: | Class 3 Flammable Liquid |
| Marine Pollutant: | NO |

| |
|--|
| EXCEPTION for Ground Shipping |
| DOT Limited Quantity: Up to 5L per inner packaging, 30 kg gross weight per package. |
| Consumer Commodity: Depending on packaging, these quantities may qualify under DOT as "ORM-D" . |

| TDG INFORMATION | |
|--------------------------|--------------------|
| TDG CLASS: | FLAMMABLE LIQUID 3 |
| SHIPPING NAME: | ADHESIVES |
| UN NUMBER/PACKING GROUP: | UN 1133, PG II |

SECTION 15 - REGULATORY INFORMATION

| | | | |
|---|---|--|--|
| Precautionary Label Information: | Highly Flammable, Harmful | Ingredient Listings: | USA TSCA, Europe EINECS, Canada DSL, Australia AICS, Korea ECL/TCCL, Japan MITI (ENCS) |
| Symbols: | F, Xi | | |
| Risk Phrases: | R-11 Highly Flammable R-36/37/38 Irritating to eyes, respiratory system and skin R-43 May cause sensitization by skin contact. | | |
| Safety Phrases: | S-2 Keep out of reach of children S-3 Keep in a cool place S-7 Keep container tightly closed S-24/25 Avoid contact with skin and eyes. | S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice S-36/37/39 Wear suitable protective clothing, gloves and eye/face protection S-46 If swallowed, seek medical advice immediately and show this container or label | |

SECTION 16 - OTHER INFORMATION

| | | |
|---|--|--|
| Specification Information: | | |
| Department issuing data sheet: | IPS, Safety Health & Environmental Affairs | All ingredients are compliant with the requirements of the European Directive on RoHS (Restriction of Hazardous Substances). |
| E-mail address: | <EHSinfo@ipscorp.com> | |
| Training necessary: | Yes, training in practices and procedures contained in product literature. | |
| Reissue date / reason for reissue: | 3/30/2015 / Updated GHS Standard Format | |
| Intended Use of Product: | Structural adhesive bonding | |

This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.