



GHS SAFETY DATA SHEET

SCIGRIP® 10 Low VOC 2-Component Adhesive

Date Revised: **JAN 2013**
Supersedes: **FEB 2012**

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SCIGRIP® 10 Low VOC 2-Component Adhesive (Refer to Technical Data Sheet for Mix ratio)
PRODUCT USE: 2-Component Cartridge, high-strength, high viscosity, reactive Structural Adhesive
SUPPLIER: **MANUFACTURER:** SCIGRIP Smarter Adhesive Solutions
 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, 813-248-0585 (International) **Medical:** Tel. 800.451.8346, 760.602.8703 3E Company (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: **OR** **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	H319 - Causes serious eye irritation	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	H336 - May cause drowsiness or dizziness		
H317 - May cause an allergic skin reaction	EUH066 - Repeated exposure may cause skin dryness or cracking		

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

	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	45 - 75
Methacrylic acid (MAA)	79-41-4	201-204-4	05-2116297727-26-0000	<2%
Component "B" (Catalyst-Initiator)				
Methyl Ethyl Ketone (MEK)	78-93-3	201-159-0	05-2116297728-24-0000	25 - 60
Benzoyl Peroxide (BPO)*	94-36-0	202-327-6	05-2116297715-31-0000	<12%

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.

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 toxic gases.
Protection for Firefighters: Self-contained breathing apparatus or full-face positive pressure air-supply masks.

	Health	Flammability	Reactivity	HMIS	NFPA	
	2	3	2	2	2	0-Minimal
						1-Slight
						2-Moderate
						3-Serious
						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 and 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 Monomer	50 ppm	100 ppm	100 ppm	N/E
	Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	N/E
	Benzoyl Peroxide	5 mg/m ³	N/E	5 mg/m ³	N/E
	Methacrylic Acid	20 ppm skin	N/E	20 ppm skin	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" White, viscous liquid; "B" Clear, syrupy liquid	Odor Threshold:	"A" 0.75 ppm (MMA) "B" 5.4 ppm (MEK)
Odor:	"A" Acrid odor, "B" Ketone	Active Oxygen Content:	<1 %
pH:	Not Applicable	Evaporation Rate:	"A" > 1.0 (BUAC = 1), "B" <1
Boiling Point:	"A" 100.5°C (212.9°F) Based on first boiling component: MMA "B" 80°C (176°F) based on MEK	Flammability:	"A" Category 2, "B" Category 2
Flash Point:	"A" 11.5°C (52.7°F) T.C.C. based on MMA, "B" -9°C (15.8°F) for ME	Flammability Limits:	LEL: "A" 1.6 (MMA), "B" - 1.4(MEK) UEL: "A" 12.5(MMA), "B" 11.4(MEK)
Specific Gravity:	"A" 1.053 @23°C (73°F), "B" 0.950 @23°C (73°F)	Vapour Pressure:	"A" 29 mm Hg @ 20°C (68°F): MMA "B" 78. mm Hg for MEK
Solubility:	"A" Slight in Water (MMA); "B" 27.5%/MEK @ 20°C (68°F)	Vapour Density:	"A" > 3 Air = 1), "B" - N/E
Auto-ignition Temperature:	"A" 421°C (789.8°F); MMA, "B" 404°C (759°F): MEK		
Decomposition Temperature:	"A" - N/A, "B" - N/A		
VOC Content:	"A" ≤ 50 g/l mixed, "B" N/E		

SECTION 10 - STABILITY AND REACTIVITY

Stability:	Stable
Hazardous decomposition products:	None in normal use. Oxides of carbon, oxides of nitrogen, hydrogen chloride, hydrocarbons, acrid smoke and toxic gases upon combustion.
Conditions to avoid:	Keep away from direct sunlight, heat, temperatures above 29°C (85°F), sparks, open flame and other ignition sources.
Incompatible Materials:	Reducing and oxidizing agents and metal contaminants

SECTION 11 - TOXICOLOGICAL INFORMATION

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

Toxicity:	LD ₅₀	LC ₅₀	Target Organs
Methyl Methacrylate Monomer (MMA)	Oral: 7900 mg/kg (rat), Dermal: >35000 mg/kg (rabbit)	Inhalation: 3 hrs. 7093 PPM (rat)	STOT SE3
Methyl Ethyl Ketone (MEK)	Oral: 2737 mg/kg (rat), Dermal: 6480 mg/kg (rabbit)	Inhalation 8 hrs. 23,500 mg/m ³ (rat)	STOT SE3
Benzoyl Peroxide	Oral: 6400 mg/kg (rat)	Oral: 2 mg/l 96 hours (guppy)	
Methacrylic Acid	Oral: 1600 mg/kg (rat), Dermal: 500 mg/kg (rabbit)	Inhalation: 6.7 mg/l (rat)	STOT SE3

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, Irritant	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.	R66 - Repeated exposure may cause skin dryness or cracking R67 - Vapors may cause drowsiness and dizziness
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 advise 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:	01/21/2013 / Updated GHS Standard Format	
Intended Use of Product:	Reactive acrylic adhesive bonding/cementing plastics and other substrates	
	Not recommended for use on PTFE, Silicone, Polypropylene, Polyethylene and other Polyolefin's or joints with an interference fit.	

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.