

GC Electronics
1801 Morgan Street
Rockford, IL 61102
Phone: (815) 968-9661
Fax: (815) 968-9731
www.gcelectronics.com

Product Name: Acrylic Cement
MSDS Number: 122
Revision Date: 12/1/03
Supersedes Date: 5/14/03

MATERIAL SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Type: Solvent Release Adhesive
Product Name: Acrylic Cement
Part Number(s): 10-4002
10-4008
Emergency Contact: Chemtrec
Phone: (800) 424-9300

Section 1 - Identification of Product

Common Name: Acrylic Cement
Chemical Name & Family: Mixture of Acrylic Resin and Organic Solvents
Product Type: Solvent Release Adhesive

Table with 4 columns: HMIS Ratings, NFPA, Minimal, and Severe. Includes values for Health (3), Flammability (3), Reactivity (0), and Protective Equipment (B-H). Includes explanatory text for B and H ratings.

Section 2 - Hazardous Ingredients

Table with 6 columns: CAS #, %WT, ACGIH=TLV Exposure Limits (PPM), ACGIH-STEL, OSHA-PEL, OSHA-STEL. Lists ingredients like Synthetic Acrylic Resin, Methylene Chloride, MEK, and Methacrylate Monomer.

*Appears in Section 313 of The Toxic Chemicals list of Title III of the Superfund Amendment and Reauthorization Act (SARA) of 1986.

(1) ACGIH suspected carcinogen, experimental teratogen, human mutagenic data, experimental reproductive effects.

(‡)Methylene Chloride is a IARC and NTP anticipated human carcinogen.

Warning: Using this product will expose you to a chemical (or chemicals) known by the State of California to cause cancer.

DOT Shipping-Land: ORM-D

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Section 3 – Physical Data

Appearance: Clear thin colorless
 Odor: Ketone like odor
 Boiling Point: 104° F (40°C) based on first boiling component: Methylene Chloride
 Specific Gravity: @73°F±3.6° (23°C±2°) Typical 1.02±0.040
 Vapor Pressure (mm/Hg): 355mmHg. @ 68°F (20°C) based on first boiling component, Methylene Chloride
 % Volatile by Volume: Approx. 80-95%
 Vapor Density (air=1): 2.93 based on Methylene Chloride
 Evaporation Rate (BUAC=1): Approximately 14.5 based on Methylene Chloride
 Solubility in Water: Solvent slightly miscible-Resin precipitate
 Form: Liquid Paste Solid Gas
 VOC Statement: Maximum VOC emissions as applied and tested per SCAQMD Rule 1168, Tool Method 316A; 350 Grams/Liter (g/l), Meets VOC emission limits for plastic cement welding.

Section 4 – Fire and Explosion Hazard Data

Flash Point: 21°F (-6°C) T.C.C. based on MEK
 Flammable Limits (% by Vol.): Lower:1.5 Upper:11.5
 Fire Extinguishing Media: Dry Chemical, carbon dioxide or foam. Water may be ineffective extinguishing agent.
 Special Fire Fighting Procedures: The use of SCBA is recommended for fire fighters. Water spray may be useful in minimizing vapors and cooling containers exposed to heat and flame. Avoid spreading burning liquid with water used for cooling purposes.
 Unusual Fire & Explosion Hazards: Avoid hot surfaces and other sources of ignition.

Section 5 – Health Hazard Data

Primary Routes of Entry: Inhalation Skin Contact Eye Contact Ingestion

Effects of Overexposure

Acute:

Inhalation:

Exposure to vapors may result in nausea, drowsiness, dizziness, headache, fatigue, other CNS effects and heart arrhythmias (irregular heart beat). Can cause irritation of eyes and nasal passages. Exposure to high concentrations may impair blood's ability to transport oxygen. Prolonged or repeated exposure to vapors may cause liver and kidney damage.

Skin Contact:

Repeated or prolonged contact may result in defatting of skin, irritation, contact dermatitis, rash, itching, swelling. May be absorbed through skin.

Eye Contact:

Direct exposure may result in irritation with corneal or conjunctival inflammation if not removed promptly. Vapors may irritate eyes.

Ingestion:

Moderately toxic, irritant to digestive tract, may include signs of central nervous system depression. Do not induce vomiting and obtain prompt medical attention.

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Chronic:

Inhalation:

‡ This material is an aspiration hazard and defats the skin. The ingredients are toxic by inhalation and ingestion and may be absorbed through the skin. Exposure by these routes may cause central nervous system depression, liver and kidney damage and may sensitize the heart muscle. Methylene Chloride may interfere with the oxygen carrying capacity of the blood. Methylene Chloride is a possible human cancer hazard based on test results with laboratory animals. Methylene Chloride has been listed as a potential carcinogen by IARC and NTP. Methylene Chloride is not believed to pose a measurable risk to man when handled as recommended. Under some circumstances, mutagenic changes have been observed with Methyl Methacrylate in animal studies. Precautions should be taken to avoid unnecessary exposure to this cement.

Ingestion:

Ingestion of alcohol may increase the potential for development of toxic effects or reactions resulting from Methylene Chloride exposure.

Reproductive Effects: Teratogenicity
N. AP.

Mutagenicity
N. AP.

Embryotoxicity
POSS.

Sensitization to Product
N. AP.

Synergistic Products
N. AV.

Medical Conditions Aggravated
By Exposure:

This material may aggravate an existing dermatitis. Individual with pre-existing disease of the heart, liver or kidney may have increased susceptibility to the toxicity of excessive exposure.

Emergency and First Aid Procedures:

Inhalation:

Remove patient to fresh air and if breathing stopped, give artificial respiration. If breathing is difficult, give oxygen. Consult physician immediately.

Eye Contact:

Immediately flush eye with flowing water for 15 minutes and contact physician.

Skin Contact:

Wash skin with soap and water. Remove contaminated clothing and shoes.

Laundry clothing before reuse. If irritation develops, get medical attention.

Ingestion:

Give 1 or 2 glasses of water or milk. Do not induce vomiting. Call physician or poison center immediately.

Section 6 - Reactivity Data

Stability:

Stable Unstable

Conditions to Avoid:

Stable under normal conditions of storage and handling. Avoid contact or exposure to fire, heat, sparks, electric arcs, open flame and hot surfaces which can cause thermal decomposition.

Incompatibility (materials to avoid):

Strong alkalies, oxygen, nitrogen, peroxide, potassium and reactive metals.

Hazardous Decomposition Products:

This product gives out carbon monoxide (CO), carbon dioxide (CO₂), Phosgene gas and smoke upon combustion or contact with reactive metals.

Hazardous Polymerization:

Will Not Occur May Occur

Conditions to Avoid:

Keep away from heat, sparks, open flame and other sources of ignition.

Section 7 – Spill or Leak Procedures

Steps to be taken in case material is released or spilled:	Evacuate area, ventilate and avoid breathing vapors. Dike area to contain spill. Clean up area (wear protective equipment) by mopping or with absorbent material and place in closed containers for disposal. Avoid contamination of ground and surface waters. Do not flush to sewer. If spill occurs indoors, turn off heating and/or air conditioning systems to prevent vapors from contaminating entire building.
Waste Disposal Method:	Recovered liquids may be sent to a licensed reclaimer or incineration facility. Contaminated material must be disposed of in a permitted solid waste management facility. Follow local, State and Federal regulation. Material should not be allowed to drain into domestic sewer or storm drains. Consult disposal expert.

Section 8 – Special Protection Information

Respiratory Protection-Specify type:	Atmospheric levels should be maintained below established exposure limits contained in Section II. If airborne concentrations exceed those limits, use of a NIOSH approved positive-pressure, full face-piece SCBA or positive-pressure, full-facepiece supplied air respirator (with auxiliary positive pressure SCBA) is recommended. Even for emergency and other conditions where short term exposure guidelines may/may not be exceeded, use of an approved positive pressure self-contained breathing apparatus (SCBA) is recommended.
Ventilation:	Use only with adequate ventilation. Do not use in close quarters of confined spaces. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below 25ppm TWA. Use only explosion proof ventilation equipment. Monitoring should be performed to determine exposure level(s) IAW (in accordance with) 29 CFR 1910.1052.
Clothing/Gloves:	PVA coated or Latex-Nitrile rubber for dipping/immersion. Surgical gloves or solvent resistant barrier crème should provide adequate protection in normal adhesive bonding usage.
Eye Protection:	Splash proof chemical goggles, face shield, safety glasses, (spectacles) with brow guards and side shields, etc. as appropriate for exposure.
Other Protective Equipment:	Impervious apron and a source of running water to flush or wash the eyes and skin in case of contact.

Section 9 – Special Precautions

Precautions to be taken in handling and storing:	Store in shaded place between 40°F-110°F (5°C-43.7°C). Keep away from all sources of heat, sparks, open flame and other sources of ignition. Close container after each use. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Train employees on all special handling procedures before they work with this product.
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Other Precautions:

Follow all precautionary information given on container label, product bulletins and our solvent cementing literature. All material handling equipment should be electrically grounded.

Section 10- Regulatory Information

	CAS #
* (1) Methylene Chloride	75-09-2
* Methyl Ethyl Ketone (MEK)	78-93-3

* 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 MSDS's that are copied and distributed for this material.

Proposition 65 Notice:
 This product contains chemicals known to the state of California to cause cancer.
 (1) ACGIH suspected carcinogen, experimental teratogen, human mutagenic data, experimental reproductive effects. Methylene Chloride is a NTP anticipated human carcinogen.

* (1) Warning: Using this product will expose you to chemical (or chemicals) known by the State of California to cause cancer.

Section 11-Other Information

Shipping information for larger than 1 liter containers.

DOT Shipping-Land:	ORM-D
DOT Shipping Name:	Flammable liquid, toxic, N.O.S. (Methyl Ethyl Ketone, Dichloromethane)
DOT Hazard Class:	3; Subsidiary Risk 5.1
Identification Number:	UN 1992
Packaging Group:	II
Label Required:	Flammable liquid and keep away from food (Domestic): Flammable liquid and toxic (International)

Shipping information for containers less than one liter.

DOT Shipping Name:	Consumer Commodity
DOT Hazard Class:	ORM-D

Disclaimer

GC Electronics believes that the information contained herein is accurate and reliable as of the date of this material safety data sheet, but no representation guarantee or warranty, express or implied, is made as to the accuracy, reliability, or completeness of the information. Persons receiving this information are encouraged to make their own determination as to the information's suitability and completeness for their particular application. NO INFORMATION CONTAINED HEREIN CONSTITUTES A PRODUCT WARRANTY OF ANY KIND, WHETHER EXPRESS OR IMPLIED; AND ALL IMPLIED WARRANTIES OF MERCHANT ABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED BY GC ELECTRONICS.