

# CHEMICALS

### SOLVENT RELEASE ADHESIVES

Most lacquer, rubber or plastic base adhesives are the solvent-release type. They are universal and easy to apply with no special preparation required. However, they are limited in their application as they are not suitable for cementing non-porous surfaces such as metals, glass, glazed ceramics and others, due to the inability of the solvent to evaporate quickly, except around the edges. They do work very well if one or both of the bonding surfaces consists of material which has some porosity.







### General Purpose Plastic Cement II

A solvent-release adhesive with a special Nitrocellulose Lacquer Base. The bond is hard, but not brittle. Adheres especially well to plastics, paper, leather, ceramics and metal. Quick-drying and waterproof. Widely used by repairmen, model builders, hobbyists and do-it-yourselfers. Ozone friendly.

Part No. 10-327 2 fl. oz. Bottle with Brush Replaces Part No. 10-324



#### Rubber-to-Metal Cement II



A heavy-bodied, rubber-based cement with outstanding bonding qualities to many materials such as natural and synthetic rubber, metal, wood and plastics. Dries quickly and produces a lasting, flexible bond which often materials the strength of the material itself. Llead exceeds the strength of the material itself. Used to cement any rubber or flexible plastic part to cabinets, chassis or panels; also for gaskets, weather strips, etc. Ozone friendly.

Part No. 10-354 2 fl. oz. Bottle with Brush Replaces Part No. 10-352



# GC Bond 😥





Thermoplastic adhesive based on synthetic components with unusually strong bonding characteristics to most materials. Produces a waterproof, resilient and long-lasting flexible bond. Light tan in color. GC Bond's uses range from cementing paper and cardboard to cementing electronic components to circuit boards and chassis. Sticks well to all metals and glass. Dries in 15

Part No. 10-4302 2 fl. oz. Bottle with Brush N.S.N. 8040-00-682-6690

Part No. 10-4308 8 fl. oz. Bottle with Brush N.S.N. 8040-00-181-7710



# Acrylic Cement





Consists of solvent for acrylics (plexiglass, lucite and others), slightly thickened with dissolved acrylic resin. It actually "welds" items made of plexiglass. The joint is usually invisible and stronger than the material itself. Cements many items used in electronics for decorative or functional purposes as well as acrylic signs, art objects and decorative pieces.

Part No. 10-4002 2 fl. oz. Bottle with Brush Part No. 10-4008 8 fl. oz. Bottle with Brush

N.S.N. 8040-00-209-1346 N.S.N. 8040-00-259-6181 N.S.N. 8040-00-503-0315



## Service Cement (Pb)





A quick-drying and waterproof clear adhesive which forms a strong, hard but vibration-resistant bond with minimal shrinkage. A true universal adhesive for shop, industry, home and hobby use. Ideal for speaker repairs. May also be used for gluing porous or semi-porous materials to each other or to metals, plastics, etc. Not suitable for metal-to-metal, glass-tometal or other non-porous to non-porous surfaces, for which Perma-Bond, GR-R-RIP or epoxy cements are more suitable.

Part No. 10-302 2 fl. oz. Bottle with Brush

Part No. 10-310 1 gal. Can



## Vinylite Cement (%)





Vinyl resin-base cement that is waterproof, almost invisible and has excellent resistance to moisture, most acids and alkalis. Used to cement items made of rigid or flexible vinyl, wood, cardboard, paper, metal, plastics, and glass. Very flexible. Lends itself particularly well to items where a rigid bond is not desirable.

Part No. 10-5802 2 fl. oz. Bottle with Brush N.S.N. 8030-00-264-3838

GC Electronics Product Name: Acrylic Cement

MSDS Number: 122

### 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

#### **Section 1 – Identification of Product**

Common Name: Acrylic Cement

Chemical Name & Family: Mixture of Acrylic Resin and Organic Solvents

Product Type: Solvent Release Adhesive

Formula: Proprietary

	NFPA	Minimal	0
3	2	Slight	1
3	3	Moderate	2
0	0	Serious	3
B- H		Severe	4
	3 3 0 B- H	3 2 3 3 0 0	3 2 Slight 3 3 Moderate 0 0 Serious

B=Eye, Hand/Skin Protection (Normal use or application and small spill clean-up activities).

H=Eye, Hand/Skin and Respiratory Protection plus impermeable apron ( when risk of immersion, dipping and/or splashing is present).

### **Section 2 – Hazardous Ingredients**

			ACGIH=TLV	ACGIH-STEL	OSHA-PEL	OSHA -STEL
	CAS #	%WT	Exposure Limits (PPM)		N/A	
Synthetic Acrylic Resin	Non/Haz	5 -20	N/A			
(1) Methylene Chloride (‡)	75-09-2	30 - 60*	50ppm		28ppm	125ppm
Methyl Acetate	79-20-9	0 - 35*	200 ppm	250 ppm	200 ppm	
Methyl Ethyl Ketone (MEK)	78-93-3	0 - 40*	200ppm	300ppm	200ppm	300ppm
Methyl Methacrylate Monomer	80-62-6	0 - 5	100ppm		100ppm	

All of the constituents of weld-on adhesive products are listed on the TSCA inventory of chemical substances maintained by the US EPA or are exempt from that list.

Part Number(s): 10-4002, 10-4008

Page 1 of 6

<sup>\*</sup>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.

GC Electronics Product Name: Acrylic Cement

MSDS Number: 122

\*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.

Proposition 65 Warning: Using this product will expose you to a chemical (or chemicals) known by the State of California to cause cancer.

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 measureable risk to man when handled as receommended. 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.

DOT Shipping-Land: ORM-D

#### Section 3 – Physical Data

Appearance: Clear thin liquid Odor: Ketone like odor

Boiling Point: 104° F (40°C) based on first boiling component: Methylene Chloride

Specific Gravity:  $@73^{\circ}F \pm 3.6^{\circ} (23^{\circ}C\pm 2^{\circ})$  Typical  $1.10 \pm 0.040$ 

Vapor Pressure (mm/Hg): 355mm Hg. @ 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: 4Liquid 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:1.8 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.

Part Number(s): 10-4002, 10-4008 Page 2 of 6