GC Electronics

1801 Morgan Street Rockford, IL 61102 Phone: (815) 968-9661 Fax: (815) 968-9731 www.gcelectronics.com Product Name: Vinylite Cement MSDS Number: 119 Revision Date: 9/16/09 Supersedes Date: 6/26/06

MATERIAL SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Type:	Solvent Release Adhesive		
Product Name:	Vinylite Cement		
Part Number(s):	10-5802	Emergency Contact: Phone:	Chemtrec (800) 424-9300

	Sec	ction 1 – Identifica	ation of Product	
Common Name: Vinylite Cem	ent			
Chemical Name and Family: N	Aixture of Res	in and Organic Sol	lvents	
Formula: Proprietary				
Product Type: Solvent Release	Adhesive			
~				
Special Hazard Designations			Minimal	0
	HMIS	NFPA	Slight	1
Health:	2	2	Moderate	2
Flammability:	3	3	Serious	3
Reactivity:	0	1	Severe	4
Protective Equipment:	B-H			
1 1	B=Eve.H	and/Skin (for norm	nal solvent-welding	g, small spill, clean-up activities)
	H= Eve har	nd/skin. respiratory	protection and in	permeable apron(splash/immersion risks)

Section 2 – Hazardous Ingredients								
None of the ingredients below are listed as carcinogens by IARC, NTP or OSHA	CAS#	Approx %	ACGIH – TLV	ACGIH- STEL	OSHA- PEL	OSHA- STEL	DUPONT (A)AEL	Г (B)STEL
Synthetic Elastomer Resin	Non/Haz		N/A		N/A			
Methyl Ethyl Ketone (MEK)	78-93-3	80*	200	300	200	300		
Tetrahydrofuran (THF)**	109-99-9	1-10	ppm 50 ppm	ppm 100 ppm	ppm 200 ppm	ppm 250 ppm	25 ppm	75 ppm

*All of the constituents of Weld-on Adhesive Products are listed on the TSCA Inventory of Chemical substances maintained by the U.S. EPA or are exempt from that listing.

*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 MSDSs that are copied and distributed for this material.

(A) Dupont's AEL guidelines for 8 hour and 12 hour TWA, (B) Dupont's recommended STEL for 15 minute TWA 75 ppm.

GC Electronics

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

** Information found in a report from the National Toxicology Program (NTP) on inhalation study in rats and mice suggests that Tetrahydrofuran (THF) can cause tumors in animals. In the study the rats and mice were exposed to THF vapor levels up to 1800 PPM for two years (their lifetime), 6 hours/day, 5 days/week. Test results showed evidence of liver tumors in female mice and kidney tumors in male rats. No evidence of tumors was seen in female rats and male mice. There is no data linking Tetrahydrofuran exposure with cancer in humans.

Section 3 – Physical Data				
Appearance: Odor: Boiling Point (°F/°C): Specific Gravity @ $73 \pm 3.6^{\circ}$ F (23°C $\pm 2^{\circ}$):	Clear, light syrupy liquid Ketone 151°F (67°C) Based on first boiling component: THF Typical 0.845 ± 0.040			
Vapor Pressure (mm Hg): Percent Volatile by Volume (%): Vapor Density (Air = 1): Evaporation Rate (BUAC = 1): Solubility in Water: VOC Statement:	 143 mm hg based on first boiling component, THF @ 68°F (20°C) Approx 75 – 90% 2.49 > 1.0 Solvent portion completely soluble in water. Resin portion separates out. VOC as manufactured: 850 Grams/Liter. Maximum VOC emission when applied and tested per SCAQMD Rule 1168, Test Method 316A: 600 Grams // iter 			
Section 4 – Fire and Explosion Hazard Data				
Flash Point: Flammable Limits (% by Volume): Fire Extinguishing Media:	-4°F(-20°C) T.C.C. Based on THF LEL 2.0 UEL 11.8 Ansul "Purple K" potassium bicarbonate dry chemical, any appropriately sized			

ABC dry chemical, carbon dioxide, or foam extinguisher can be used for small fires. Use of a water fog by trained personnel can extinguish small/large fires. Evacuate enclosed areas, stay upwind. Closed quarters or confined spaces require self-contained breathing apparatus, positive pressure hose masks or airline masks. Use of water fog by trained personnel can extinguish small/large fires and avoid water flow or water streams/spray distributing burning material or contaminated water over a large area or into sewers or storm drains. Use water spray to cool containers, to flush spills from source of ignition and to disperse

Fire hazard because of low flash point and high volatility. Vapors are heavier than air and may travel to source of ignition at or near ground or lower levels and

Special	Fire	Fighting	Procedures:
~p••••		88	110000000000

Unusual Fire and Explosion Hazards:

Section 5 – Health Hazard Data								
Primary Routes of Entry:	X Inhalation	X Skin Contact	Eye Contact	Ingestion				
Effect of Overexposure								

vapors.

flash back.

Rockford, IL 61102 Revision Date: 9/16/09 Phone: (815) 968-9661 Supersedes Date: 6/26/06 (815) 968-9731 Fax: www.gcelectronics.com Acute Inhalation: Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages. Skin Contact: Skin irritant. Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact. Skin Absorption: Prolonged or widespread exposure may result in the absorption of harmful amounts of material. Eye Contact: Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid. Vapors slightly uncomfortable. Moderately toxic. May cause nausea, vomiting, diarrhea. May cause mental Ingestion: sluggishness. Chronic: Symptoms of respiratory tract irritation and damage to respiratory epithelium were reported in rats exposed to 5000 ppm THF for 90 days. Elevation of SGPT suggests a disturbance in liver function. The NOEL was reported to be 200 ppm. Medical Conditions Aggravated by Exposure: Individuals with pre-existing diseases of the eyes, skin or respiratory system may have increased susceptibility to the toxicity of excessive exposures. **Emergency and First Aid Procedures** Inhalation: If overcome by vapors, remove to fresh air and if breathing stopped, give artificial respiration. If breathing is difficult, give oxygen. Call physician. Flush eyes with plenty of water for 15 minutes and call a physician. Eye Contact: Skin Contact: Remove contaminated clothing and shoes. Wash skin with plenty of soap and water for at least 15 minutes. If irritation develops, get medical attention. Give 1 or 2 glasses of water or milk. Do not induce vomiting. Call physician or Ingestion: poison control center immediately. Section 6 - Reactivity Data Stability: Unstable X Stable Conditions to Avoid: Keep away from heat, sparks, open flame and other sources of ignition. Incompatibility (materials to avoid): Caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates. Hazardous Decomposition Products: When forced to burn, this product gives out carbon monoxide, carbon dioxide,

Hazardous Polymerization: Conditions to Avoid:

GC Electronics

1801 Morgan Street

Section 7 – Spill or Leak Procedures

hydrogen chloride and smoke.

___ May Occur

Steps to be taken in case material is released or spilled:

Eliminate all ignition sources. Avoid breathing of vapors. Keep liquid out of eyes. Flush with large amount of water. Contain liquid with sand or earth. Absorb with sand or nonflammable absorbent material and transfer into steel

X Will not occur

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

Product Name: Vinylite Cement

MSDS Number: 119

GC Electronics 1801 Morgan Street Rockford, IL 61102 Phone: (815) 968-9661 Fax: (815) 968-9731 www.gcelectronics.com	Product Name: Vinylite Cement MSDS Number: 119 Revision Date: 9/16/09 Supersedes Date: 6/26/06				
	drums for recovery or disposal. Prevent liquid from entering drains.				
Waste Disposal Method:	Follow local, state and federal regulations. Consult disposal expert. Can be disposed of by incineration. Excessive quantities should not be permitted to enter drains. Empty containers should be air dried before disposing. Hazardous Waste Code (CA): 214.				
S	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 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 broathing appearatue.				
Ventilation:	Use only with adequate ventilation. Do not use in close quarters or 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 levels listed in Section II. Use only explosion proof ventilation equipment.				
Protective Gloves:	PVA coated rubber gloves for frequent dipping/immersion. Use of latex/nitrile surgical gloves or solvent resistant barrier crème should provide adequate protection when normal solvent-cement welding practices and procedures are used for solvent welding of plastic sheet/pipe joints.				
Eye Protection:	Splashproof chemical goggles, face shield, safety glasses (spectacles) with brow guard and side shields, etc. as appropriate to exposure.				
Other Protective Equipment and Hygienic Practices:	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 the shade between 40°F - 110°F(5°C-43.7°C). Keep away from heat, sparks, open flame and other sources of ignition. Avoid prolonged breathing of vapor. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Train employees on all special handling procedures before they work				
Other Precautions:	with this product. Follow all precautionary information given on container label, product bulletins and our solvent cementing literature. All handling equipment should be electrically grounded.				

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

Section 10-Regulatory Information

Shipping information for gallon	
containers or above	
DOT Shipping Name:	Adhesive
DOT Hazard Class:	3
Identification Number:	UN 1133
Packaging Group:	II
Label Required:	Flammable Liquid
Description:	Resin + Organic Solvent Mixture
Shipping information for containers	-
less than one gallon	
DOT Shipping Name:	Consumer Commodity
DOT Hazard Class:	ORM-D

*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 MSDSs that are copied and distributed for this material.

			1 CONT	1 CONT	0.011.4	0.011	DUPONT		
	CAS#	Approx %	ACGIH – TLV	ACGIH- STEL	OSHA- PEL	OSHA- STEL	(A)AEL	(B)STEL	
Synthetic Elastomer Resin	Non/Haz		N/A		N/A				
Methyl Ethyl Ketone (MEK)	78-93-3	71-90*	200	300	200	300			
Tetrahydrofuran (THF)**	109-99-9	1-10	ppm 200	ppm 250	ppm 200	ppm 250	25 ppm	75 ppm	
foldaly grotatian (1111)	107 77 7	1 10	ppm	ppm	ppm	ppm	25 ppm	/o ppin	

** Information found in a report from the National Toxicology Program (NTP) on inhalation study in rats and mice suggests that Tetrahydrofuran (THF) can cause tumors in animals. In the study the rats and mice were exposed to THF vapor levels up to 1800 PPM for two years (their lifetime), 6 hours/day, 5 days/week. Test results showed evidence of liver tumors in female mice and kidney tumors in male rats. No evidence of tumors was seen in female rats and male mice. There is no data linking Tetrahydrofuran exposure with cancer in humans.

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.