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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: Chemtrec
Phone: (800) 424-9300

Section 1 – Identification of Product

Common Name: Vinylite Cement
Chemical Name and Family: Mixture of Resin and Organic Solvents
Formula: Proprietary
Product Type: Solvent Release Adhesive

Special Hazard Designations	HMIS	NFPA
Health:	2	2
Flammability:	3	3
Reactivity:	0	1

Minimal	0
Slight	1
Moderate	2
Serious	3
Severe	4

Protective Equipment: B-H
B= Eye , Hand/Skin (for normal solvent-welding, small spill, clean-up activities)
H= Eye hand/skin, respiratory protection and impermeable 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	DUPONT (B)STEL
Synthetic Elastomer Resin	Non/Haz		N/A		N/A			
Methyl Ethyl Ketone (MEK)	78-93-3	80*	200 ppm	300 ppm	200 ppm	300 ppm		
Tetrahydrofuran (THF)**	109-99-9	1-10	50 ppm	100 ppm	200 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.

** 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:	Clear, light syrupy liquid
Odor:	Ketone
Boiling Point (°F/°C):	151°F (67°C) Based on first boiling component: THF
Specific Gravity @ 73 ± 3.6°F (23°C ± 2°):	Typical 0.845 ± 0.040
Vapor Pressure (mm Hg):	143 mm hg based on first boiling component, THF @ 68°F (20°C)
Percent Volatile by Volume (%):	Approx 75 – 90%
Vapor Density (Air = 1):	2.49
Evaporation Rate (BUAC = 1):	> 1.0
Solubility in Water:	Solvent portion completely soluble in water. Resin portion separates out.
VOC Statement:	VOC as manufactured: 850 Grams/Liter. Maximum VOC emission when applied and tested per SCAQMD Rule 1168, Test Method 316A: 600 Grams/Liter.

Section 4 – Fire and Explosion Hazard Data

Flash Point:	-4°F(-20°C) T.C.C. Based on THF
Flammable Limits (% by Volume):	LEL 2.0 UEL 11.8
Fire Extinguishing Media:	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.
Special Fire Fighting Procedures:	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 vapors.
Unusual Fire and Explosion Hazards:	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 flash back.

Section 5 – Health Hazard Data

Primary Routes of Entry: X Inhalation X Skin Contact __ Eye Contact __ Ingestion

Effect of Overexposure

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.
Ingestion:	Moderately toxic. May cause nausea, vomiting, diarrhea. May cause mental 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.
Eye Contact:	Flush eyes with plenty of water for 15 minutes and call a physician.
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.
Ingestion:	Give 1 or 2 glasses of water or milk. Do not induce vomiting. Call physician or 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, hydrogen chloride and smoke.
Hazardous Polymerization:	__ May Occur X Will not 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:	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

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.

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 breathing apparatus.

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 with this product.

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

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

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Disclaimer

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