

**MATERIAL SAFETY DATA SHEET**

**SECTION 1 PRODUCT AND COMPANY IDENTIFICATION**  
Trade Name: CARLON ALL WEATHER ENT BLUE PVC CEMENT  
Product Numbers: VC9992  
Product Use: Cement for PVC Plastic Pipe  
Formula: PVC Resin in Solvent Solution  
Synonyms: PVC Plastic Pipe Cement  
Firm Name & Mailing Address: CARLON ELECTRICAL PRODUCTS c/o OATEY CO. 4700 West 160th Street  
P.O. Box 35906 Cleveland, Ohio 44135, U.S.A.  
<http://www.oatey.com>  
Oatey Phone Number: (216) 267-7100 or (800) 321-9532  
Emergency Phone Numbers: For Emergency First Aid call 1-303-623-5716 COLLECT. For chemical transportation emergencies ONLY, call Chemtrec at 1-800-424-9300. Outside the U.S. 1-703-527-3887.  
Prepared By: Corporate Director - Safety and Environmental Compliance  
Preparation Date: September 30, 2005

**SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS**

INGREDIENTS:	%wt/wt :	CAS NUMBER:	ACGIH TLV TWA:	OSHA PEL TWA:	OTHER:
Tetrahydrofuran	40 - 70%	109-99-9	50 ppm(skin) 100 ppm STEL	200 ppm	25 ppm (Mfg)
PVC Resin (Non-hazardous)	10 - 20%	9002-86-2	10 mg/m3	15 mg/m3	None
Cyclohexanone	10 - 20%	108-94-1	20 ppm(skin) 50 ppm STEL	50 ppm	None
Amorphous Fumed Silica (Non-hazardous)	1 - 4%	112945-52-5	10 mg/m3	None Established	None

OSHA Hazard Classification: Flammable, irritant, organ effects

**SECTION 3 HAZARDS IDENTIFICATION**  
Emergency Overview:  
Clear blue liquid with an ether-like odor. Extremely flammable liquid and vapor. Vapors may cause flash fire. May cause eye and skin irritation. Inhalation of vapors or mist may cause respiratory irritation and central nervous system effects. Swallowing may cause irritation, nausea, vomiting, diarrhea and kidney or liver disorders. Aspiration hazard. May be fatal if swallowed. Symptoms may be delayed.

**SECTION 4 FIRST AID MEASURES**  
CALL 1-303-623-5716 COLLECT  
Skin: Remove contaminated clothing immediately. Wash all exposed areas with soap and water. Get medical attention if irritation develops. Remove dried cement with Oatey Plumber's Hand Cleaner or baby oil.  
Eyes: If material gets into eyes or if fumes cause irritation, immediately flush eyes with plenty of water until chemical is removed. If irritation persists, get medical attention immediately.  
Inhalation: If symptoms of exposure develop, remove to fresh air. If breathing becomes difficult, administer oxygen. Administer artificial respiration if breathing has stopped. Seek immediate medical attention.  
Ingestion: **DO NOT INDUCE VOMITING.** Rinse mouth with water. Never give anything by mouth to a person who is unconscious or drowsy. Get immediate medical attention by calling a Poison Control Center, or hospital emergency room. If medical advice cannot be obtained, then take the person and product to the nearest medical emergency treatment center or hospital.

**SECTION 5 FIRE FIGHTING MEASURES**

Flashpoint / Method: 0 - 5 Degrees F. (-18 - -15 Degrees C / PMCC  
Flammability: LEL = 1.8 % Volume, UEL = 11.8 % Volume  
Extinguishing: Use dry chemical, CO<sub>2</sub>, or foam to extinguish fire. Cool fire  
Media: exposed container with water. Water may be ineffective as an  
extinguishing agent.  
Special Fire: Firefighters should wear positive pressure self-contained  
Fighting: breathing apparatus and full protective clothing for fires in  
Procedure: areas where chemicals are used or stored  
Unusual Fire and: Extremely flammable liquid. Keep away from heat and all  
Explosion: sources of ignition including sparks, flames, lighted  
Hazards: cigarettes and pilot lights. Containers may rupture or  
explode in the heat of a fire. Vapors are heavier than air  
and may travel to a remote ignition source and flash back.  
This product contains tetrahydrofuran that may form explosive  
organic peroxide when exposed to air or light or with age.  
Hazardous: Combustion will produce toxic and irritating vapors including  
Decomposition: carbon monoxide, carbon dioxide and hydrogen chloride.  
Products:

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

Spill or: Remove all sources of ignition and ventilate area. Stop leak if it  
Leak: can be done without risk. Personnel cleaning up the spill should  
Procedures: wear appropriate personal protective equipment, including respirators  
if vapor concentrations are high. Soak up spill with an inert  
absorbent such as sand, earth or other non-combusting material. Put  
absorbent material in covered, labeled metal containers. Prevent  
liquid from entering watercourses, sewers and natural waterways.  
Report releases to authorities as required. See Section 13 for  
disposal information.

**SECTION 7 HANDLING AND STORAGE**

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapors  
or mists. Use with adequate ventilation (equivalent to outdoors).  
Wash thoroughly after handling. Do not eat, drink or smoke in the  
work area. Keep product away from heat, sparks, flames and all other  
sources of ignition. No smoking in storage or use areas. Keep  
containers closed when not in use.  
Storage: Store in a cool, dry, well-ventilated area away from incompatible  
materials. Keep containers closed when not in use.  
Other: "Empty" containers retain product residue and can be hazardous.  
Follow all MSDS precautions in handling empty containers. Do not cut  
or weld on or near empty or full containers.

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

Ventilation: Open doors & windows. Provide ventilation capable of maintaining  
emissions at the point of use below recommended exposure limits. If  
used in enclosed area, use exhaust fans. Exhaust fans should be  
explosion-proof or set up in a way that flammable concentrations of  
solvent vapors are not exposed to electrical fixtures or hot  
surfaces.  
Respiratory: For operations where the exposure limit may be exceeded, a NIOSH  
Protection: approved organic vapor respirator or supplied air respirator is  
recommended. Equipment selection depends on contaminant type and  
concentration, select in accordance with 29 CFR 1910.134 and good  
industrial hygiene practice. For firefighting, use self-contained  
breathing apparatus.  
Skin: Rubber gloves are suitable for normal use of the product. For long  
Protection: exposures chemical resistant gloves may be required such as  
4H(tm) or Silver Shield(tm) to avoid prolonged skin contact.

SECTION 8 (Continued)

Eye Safety glasses with side shields or safety goggles.  
Protection:  
Other: Eye wash and safety shower should be available.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

Boiling Point: 151 Degrees F / 66 Degrees C  
Melting Point: Not determined  
Vapor Pressure: 145 mmHg @ 20 Degrees C  
Vapor Density: (Air = 1) 2.5  
Volatile Components: 80-85%  
Solubility In Water: Negligible  
pH: Not determined  
Specific Gravity: 0.94 +/- 0.02 @ 20 Degrees C  
Evaporation Rate: (BUAC = 1) = 5.5 - 8.0  
Appearance: Clear Blue Liquid  
Odor: Ether-Like  
Will Dissolve In: Tetrahydrofuran  
Material Is: Liquid

**SECTION 10 STABILITY AND REACTIVITY**

Stability: Stable.  
Conditions To Avoid: Avoid heat, sparks, flames and other sources of ignition.  
Hazardous Combustion will produce toxic and irritating vapors  
Decomposition including carbon monoxide, carbon dioxide and hydrogen  
Products: chloride.  
Incompatibility/ Oxidizing agents, alkalis, amines, ammonia, acids, chlorine  
Materials To Avoid: compounds, chlorinated inorganics (potassium, calcium and  
sodium hypochlorite) and hydrogen peroxides. May attack  
plastic, resins and rubber.  
Hazardous Will not occur.  
Polymerization:

**SECTION 11 TOXICOLOGICAL INFORMATION**

Inhalation: Vapors or mists may cause mucous membrane and respiratory  
irritation, coughing, headache, dizziness, dullness, nausea,  
shortness of breath and vomiting. High concentrations may cause  
central nervous system depression, narcosis and unconsciousness.  
May cause kidney, liver and lung damage.  
Skin: May cause irritation with redness, itching and pain.  
Cyclohexanone may be absorbed through the skin causing effects  
similar to those listed under inhalation.  
Eye: Vapors may cause irritation. Direct contact may cause irritation  
with redness, stinging and tearing of the eyes. May cause eye  
damage.  
Ingestion: Swallowing may cause abdominal pain, nausea, vomiting and  
diarrhea. Aspiration during swallowing or vomiting can cause  
chemical pneumonia and lung damage. May cause kidney and liver  
damage.  
Chronic Prolonged or repeated overexposure cause dermatitis and damage  
Toxicity: to the kidney, liver, lungs and central nervous system.  
Toxicity Data: Cyclohexanone: Oral rat LD50: 1,620 mg/kg  
Inhalation rat LC50: 8,000 ppm/4 hours  
Skin rabbit LD50: 1 mL/kg  
Tetrahydrofuran: Oral rat LD50: 1,650 mg/kg  
Inhalation rat LC50: 21,000 ppm/3 hours

SECTION 11 (Continued)

Sensitization: None of the components are known to cause sensitization.  
 Carcinogenicity: None of the components are listed as a carcinogen or suspect carcinogen by NTP, IARC or OSHA. The National Toxicology Program has reported that exposure of mice and rats to tetrahydrofuran (THF) vapor levels up to 1800 ppm 6 hr/day, 5 days/week for their lifetime caused an increased incidence of kidney tumors in male rats and liver tumors in female mice. The significance of these findings for human health is unclear at this time, and may be related to "species specific" effects. Elevated incidences of tumors in humans have not been reported for THF. ACGIH has classified cyclohexanone (CYH) and tetrahydrofuran as "A3," Confirmed Animal Carcinogens with Unknown Relevance to Humans.  
 Mutagenicity: Cyclohexanone has been positive in bacterial and mammalian assays. Tetrahydrofuran is generally thought not to be mutagenic.  
 Reproductive Toxicity: Cyclohexanone has been shown to cause embryofetal toxicity and birth defects in laboratory animals. Tetrahydrofuran has been found to cause adverse developmental effects only when exposure levels cause other toxic effects to the mother.  
 Medical Conditions Aggravated By Exposure: Persons with pre-existing skin, lung, kidney or liver disorders may be at increased risk from exposure to this product.

**SECTION 12 ECOLOGICAL INFORMATION**

This product is not expected to be toxic to aquatic organisms.  
 Cyclohexanone: 96 hour LC50 values for fish is over 100 mg/l.  
 Tetrahydrofuran: 96 hour LC50 fathead minnow: 2160 mg/L.

VOC Information: This product emits VOC's (volatile organic compounds) in its use. Make sure that use of this product complies with local VOC emission regulations, where they exist.  
 VOC Level: 650 g/l per SCAQMD Test Method 316A.

**SECTION 13 DISPOSAL CONSIDERATIONS**

Waste Disposal: Dispose in accordance with current local, state and federal regulations.  
 RCRA Hazardous Waste Number: U002, U057, U213  
 EPA Hazardous Waste ID Number: D001, F003  
 EPA Hazard Waste Class: Ignitable Waste.

**SECTION 14 TRANSPORT INFORMATION**

DOT	<u>Less than 1 Liter (0.3 gal)</u>	<u>Greater than 1 Liter (0.3 gal)</u>
Proper Shipping Name:	Consumer Commodity	Adhesives
Hazard Class/Packing Group:	ORM-D	3, PGII
UN/NA Number:	None	UN1133
Hazard Labels:	None	Flammable Liquid
IMDG		
Proper Shipping Name:	Adhesives	Adhesives
Hazard Class/Packing Group:	3, II	3, II
UN Number:	UN1133	UN1133
Label:	None (Limited Quantities are excepted from labeling)	Class 3 (Flammable Liquid)
2004 North American Emergency Response Guidebook Number:	127 or 128	

**SECTION 15 REGULATORY INFORMATION**

Hazard Category for Section 311/312: Acute Health, Chronic Health, Flammable

Section 302 Extremely Hazardous Substances (TPQ): This product does not contain chemicals regulated under SARA Section 302.

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements:

<u>Chemical</u>	<u>CAS #</u>	<u>% by wt.</u>
None		

CERCLA 103 Reportable Quantity: Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for the product, based on the RQ for Tetrahydrofuran (70% maximum) of 1,000 lbs, is 1,430 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

California Proposition 65: This product contains trace amounts of chemicals known to the State of to cause cancer. Under normal Use conditions, exposure to these chemicals at levels above the State of California "No Significant Risk Level" (NSRL) are unlikely. Oatey strongly encourages the use of proper personal protective equipment (PPE) and ventilation guidelines noted in Section 8 to minimize exposure to these chemicals.

TSCA Inventory: All of the components of this product are listed on the TSCA inventory.

Canadian WHIMS Classification: Class B, Division 2; Class D, Division 2, Subdivision B. Class D, Division 2, Subdivision A. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**SECTION 16 OTHER INFORMATION**

NFPA and HMIS:

NFPA Hazard Signal: Health: 2 Flammability: 3 Reactivity: 1 Special: None

HMIS Hazard Signal: Health: 2\* Flammability: 3 Reactivity: 1 PPE: G

Disclaimer:

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