

MATERIAL SAFETY DATA SHEET

CARLON MEDIUM GRAY PVC SOLVENT CEMENT

Latest Revision Date.....03/18/99

Date of Issue.....5/25/01

SECTION 1 IDENTITY OF MATERIAL

TRADE NAME..... CARLON MEDIUM GRAY PVC SOLVENT CEMENT
PRODUCT NUMBERS..... VC9922, VC9923, VC9941P
FORMULA..... PVC Resin in Solvent Solution
SYNONYMS..... PVC Plastic Pipe Cement

SECTION 2 HAZARDOUS INGREDIENTS

<u>INGREDIENTS</u>	<u>%</u>	<u>CAS NUMBER</u>	<u>SEC 313</u>
PVC Resin (Non-Hazardous)	12-17%	9002-86-2	No
Tetrahydrofuran (See SECTION 6)	30-40%	109-99-9	No
Methyl Ethyl Ketone	30-48%	78-93-3	Yes
Cyclohexanone	5-10%	108-94-1	No
Acetone	<1%	67-64-1	No
Amorphous Silica	<5%	112945-52-5	No
Gray Colorant	<1%	N/A	No

SECTION 3 KNOWN HAZARDS UNDER 29 CFR 1910.1200

<u>HAZARDS</u>	<u>YES</u>	<u>NO</u>	<u>HAZARDS</u>	<u>YES</u>	<u>NO</u>
Combustible Liquid		X	Skin Hazard	X	
Flammable Liquid	X		Eye Hazard	X	
Pyrophoric Material		X	Toxic Agent	X	
Explosive Material		X	Highly Toxic Agent		X
Unstable Material		X	Sensitizer		X
Water Reactive Material		X	Kidney Toxin	X	
Oxidizer		X	Reproductive Toxin	X	
Organic Peroxide		X	Blood Toxin		X
Corrosive Material		X	Nervous System Toxin	X	
Compressed Gas		X	Lung Toxin	X	
Irritant	X		Liver Toxin	X	
Carcinogen NTP/IARC/OSHA (See SECTION 6)	X				

SECTION 4 REGULATION

<u>CHEMICAL</u>	<u>TLV (TWA)</u>	<u>PEL</u>	<u>STEL</u>	<u>Hazard Action Level</u>
Tetrahydrofuran	200 ppm, 590 mg/cu m	200 ppm, 590 mg/cu m	250 ppm, 735 mg/cu m	N/A
Methyl Ethyl Ketone	200 ppm, 590 mg/cu m	200 ppm, 590 mg/cu m	300 ppm, 885 mg/cu m	N/A
Cyclohexanone	25 ppm, 100 mg/cu m (skin)	50 ppm, 200 mg/cu m	N/A	N/A
Acetone	500 ppm, 1200 mg/cu m	1000 ppm, 2400 mg/cu m	750 ppm, 1800 mg/cu m	N/A
Amorphous Silica	10 mg/cu m	20 mppcf	N/A	N/A

SECTION 5 REGULATED IDENTIFICATION

DOT PROPER SHIPPING NAME.....CONSUMER COMMODITY ORM-D; For gallons: Adhesive, (Contains Tetrahydrofuran, Methyl Ethyl Ketone) 3, UN1133, PG II, Cement-002

DOT HAZARD CLASS.....Flammable Liquid

SHIPPING ID NUMBER..... NA 1133 (Gallons Only)

EPA HAZARDOUS WASTE ID NUMBER.....D-001

EPA HAZARD WASTE CLASS..... Ignitable Waste/Toxic Waste

SECTION 6 EFFECTS OF EXPOSURE

ENTRY ROUTE..... INHALE- YES INGEST- YES SKIN- YES EYE-YES

INHALATION.....May cause irritation of mucous membranes, nose & throat, headache, dizziness, nausea, numbness of the extremities and narcosis in high concentrations. Has caused CNS depression & liver damage in animals, & high concentrations have caused retardation of fetal development in rats.

TETRAHYDROFURAN
WARNING.....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 are unclear at this time, and may be related to "species specific" effects. Elevated incidences of tumors in humans have not been reported for THF. THF is not listed as a carcinogen by NTP, IARC, or OSHA. One THF vendor has recommended a reduction in the "acceptable exposure limit" from 200 ppm to 25 ppm, 8 and 12 hour time weighted average.

SKIN.....Chronic contact may lead to irritation & dermatitis. Chronic exposure to vapors of high concentration may cause dermatitis. May possibly be absorbed through the skin.

EYE.....Vapors or direct contact may cause irritation.

INGESTION.....May be aspirated into lungs or cause systemic effects described under inhalation.

TARGET ORGANS.....Eye, Skin, Kidney, Lung, Liver, Central Nervous System

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CARLON
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SECTION 7 **EMERGENCY AND FIRST AID PROCEDURES - 303/623-5716 COLLECT**

SKIN..... If irritation arises, wash thoroughly with soap and water. Seek medical attention if irritation persists.
EYES..... If fumes cause irritation, move to fresh air and irrigate eyes with water for 15 minutes. If irritation persists, seek medical attention. If eye is struck with wire, seek medical attention.
INHALATION..... Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Keep victim quiet and warm. Call a poison control center or physician immediately.
INGESTION..... Drink water and call a poison control center or physician immediately. Avoid alcoholic beverages. Never give anything by mouth to an unconscious person.

SECTION 8 **PHYSICAL AND CHEMICAL PROPERTIES**

NFPA HAZARD SIGNAL... HEALTH 2 STABILITY 1 FLAMMABILITY 3 SPECIAL NONE
BOILING POINT..... 151 Degrees F / 66 C
MELTING POINT..... N/A
VAPOR PRESSURE..... 145 mmHg @ 20 Degrees C
VAPOR DENSITY (AIR = 1). 2.5
VOLATILE COMPONENTS. 88 +/- 2%
SOLUBILITY IN WATER... Negligible
PH..... N/A
SPECIFIC GRAVITY..... 0.94 +/- 0.01
EVAPORATION RATE..... (BUAC = 1) = 5.5 - 8.0
APPEARANCE..... Gray Liquid
ODOR..... Ether-Like
WILL DISSOLVE IN..... Tetrahydrofuran
MATERIAL IS..... Liquid

SECTION 9 **FIRE AND EXPLOSION HAZARD DATA**

FLAMMABILITY..... LEL = 1.8 % Volume UEL = 11.8 % Volume
FLASHPOINT AND METHOD USED..... 0 - 5 Degrees F. / PMCC
STABILITY..... Stable CONDITIONS TO AVOID: Heat, sparks and open flame. HAZARDOUS DECOMP.
PDTS.: Carbon monoxide / carbon dioxide / hydrogen chloride / smoke.
HAZARDOUS POLYMERIZATION..... Will Not Occur. CONDITIONS TO AVOID: None
INCOMPATIBILITY / MAT. TO AVOID..... Acids, oxidizing materials, alkalis, chlorinated inorganics (potassium, calcium and sodium hypochlorite), copper or copper alloys.
SPECIAL FIRE FIGHTING PROCEDURE..... FOR SMALL FIRES: Use dry chemical, CO2, water or foam extinguisher. FOR LARGE FIRES: Evacuate area and call Fire Department immediately.

SECTION 10 **SPILL AND DISPOSAL INFORMATION**

SPILL OR LEAK PROCEDURES..... Ventilate area, stop leak if it can be done without risk. Take up with sand, earth, or other non-combustible absorbing material.
WASTE DISPOSAL..... Dispose of according to Local, State, and Federal regulations.

SECTION 11 **SAFE USAGE DATA**

PROTECTIVE EQUIPMENT TYPES..... EYES: Safety glasses with side shields.
RESPIRATORY: NIOSH-approved canister respirator in absence of adequate ventilation.
GLOVES: Rubber gloves. OTHER: Eye wash and safety shower should be available.
VENTILATION..... GENERAL MECHANICAL: Exhaust ventilation capable of maintaining emissions at the point of use below PEL. LOCAL EXHAUST: Open doors & windows. If used in enclosed area, use exhaust fans.
PRECAUTIONS..... HANDLING & STORAGE: Keep away from heat, sparks and flames; store in cool, dry place.
OTHER: Containers, even empties will retain residue and vapors.

SECTION 12 **MANUFACTURER OR SUPPLIER DATA**

FIRM NAME & MAILING ADDRESS..... CARLON, c/o OATEY CO.
4700 West 160th Street, P.O. Box 35906, Cleveland, Ohio 44135
OATEY PHONE NUMBER..... (216) 267-7100
EMERGENCY PHONE NUMBER:..... For Emergency First Aid call (303) 623-5716 COLLECT.
For chemical transportation emergencies ONLY, call Chemtrec at 1-800-424-9300

SECTION 13 **DISCLAIMER**

The information herein has been compiled from sources believed to be reliable, up-to-date, and is accurate to the best of our knowledge. However, Oatey cannot give any guarantees regarding information from other sources, and expressly does not make warranties, nor assumes any liability for its use.