IDENTITY OF MATERIAL SECTION 1

Trade Name: CARLON STANDARD CLEAR PVC SOLVENT CEMENT

Product Numbers: VC9961P, VC9962, VC9963, VC9965, VC9963C, VC9965C

Formula: PVC Resin in Solvent Solution

Synonyms: PVC Plastic Pipe Cement

Firm Name & CARLON c/o Oatey Co. 4700 West 160th Street Mailing Address: P.O. Box 35906 Cleveland, Ohio 44135, U.S.A.

Oatey Phone Number: (216) 267-7100

Emergency Phone For Emergency First Aid call 1-303-623-5716 COLLECT. For Numbers:

chemical transportation emergencies ONLY, call Chemtrec at

1-800-424-9300

SECTION 2	COMPOSITION				
INGREDIENTS:	%: C	AS NUMBER: .	ACGIH TLV TWA:	OSHA PEL	TWA: OTHER:
Acetone	0 - 1%	67-64-1	500 ppm	1000 ppm	
			750 ppm STEL		
Cyclohexanone	5 - 10%	108-94-1	25 ppm(skin)	50 ppm	
Tetrahydrofuran	30 - 40%	109-99-9	200 ppm	200 ppm	25 ppm (Mfg)
			750 ppm STEL		
Methyl Ethyl Ketone	30 - 48%	78-93-3	200 ppm	200 ppm	
PVC Resin	10 - 16%	9002-86-2	10 mg/m3	15 mg/m3	
(Non-hazardous)					
Amorphous Fumed Silica	1 - 3%	112945-52-	5 10 mg/m3	None	

(Non-hazardous)

SECTION 3 EMERGENCY OVERVIEW

Clear 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.

Established

Aspiration hazard. May be fatal if swallowed. Symptoms may be delayed.

NFPA Hazard Signal: Health: 2 Stability: 1 Flammability: 3 Special: None HMIS Hazard Signal: Health: 3 Stability: 1 Flammability: 3 Special: None

OSHA Hazard Classification: Flammable, irritant, organ effects

Class B, Division 1; Class D, Division 2, Canadian WHIMS Classification:

Subdivision B

SECTION 4 EMERGENCY AND FIRST AID PROCEDURES - CALL 1-303-623-5716 COLLECT

Remove contaminated clothing immediately. Wash all exposed areas with Skin: soap and water. Get medical attention if irritation develops. Remove

dried cement with Oatey Plumber's Hand Cleaner or baby oil.

If material gets into eyes or if fumes cause irritation, immediately Eyes:

flush eyes with water for 15 minutes. If irritation persists, seek

medical attention.

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.

DO NOT INDUCE VOMITING. Rinse mouth with water. Never give anything Ingestion:

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. / PMCC

Flammability: LEL = 1.8 % Volume, UEL = 11.8 % Volume

Extinguishing Use dry chemical, CO2, 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 breathing apparatus and full protective clothing for fires in Fighting

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. Combustion will produce toxic and irritating vapors including

Hazardous 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 12 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.

Store in a cool, dry, well-ventilated area away from incompatible Storage:

materials. Keep containers closed when not in use.

"Empty" containers retain product residue and can be hazardous. Other:

Follow all MSDS precautions in handling empty containers. Do not cut

or weld on or near empty or full containers.

SECTION 8 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.

Methyl Ethyl Ketone: 96 hour LC50 for fish is greater than 100 mg/L.

Acetone: 96 hour LC50 for fish is greater than 100 mg/L.

VOC This product emits VOC's (volatile organic compounds) in its use.

Information: Make sure that use of this product complies with local VOC emission

regulations, where they exist.

VOC Level: 600 g/l per SCAQMD Test Method 316A.

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SECTION 9 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 product chemical resistant gloves may be required such as

4H(tm) or Silver Shield(tm) to avoid prolonged skin contact.

Eye Safety glasses with sideshields or safety goggles.

Protection:

Other: Eye wash and safety shower should be available.

SECTION 10 PHYSICAL AND CHEMICAL PROPERTIES

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: 86-90%

Solubility In Water: Negligible

pH: N/A

Specific Gravity: 0.91 + - 0.02

Evaporation Rate: (BUAC = 1) = 5.5 - 8.0

Appearance: Clear Liquid
Odor: Ether-Like
Will Dissolve In: Tetrahydrofuran

Material Is: Liquid

SECTION 11 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, alkalies, 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 12 DISPOSAL INFORMATION

Waste Disposal: Dispose in accordance with current local, state and federal

regulations.

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CARLON STANDARD CLEAR PVC SOLVENT CEMENT SECTION 13 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. Methyl ethyl ketone and 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 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: Acetone: Oral rat LD50: 5,800 mg/kg Inhalation rat LC50: 50,100 mg/m3/8 hours Oral rat LD50: 1,620 mg/kg Cyclohexanone: 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 Methyl Ethyl Ketone: Oral rat LD50: 2,737 mg/kg Inhalation rat LC50: 23,500 mg/m3/8 hours Skin rabbit LD50: 6,480 mg/kg Sensitization: None of the components are known to cause sensitization. None of the components are listed as a carcinogen or suspect Carcinogenicity: 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 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. Mutagenicity: Acetone has been positive in a mammal cell cytogenic analysis but negative in many other assays. At most, acetone is weakly genotoxic. Cyclohexanone has been positive in bacterial and mammalian assays. Tetrahydrofuran was positive in a bacterial assay. Methyl ethyl ketone is not considered genotoxic based on laboratory studies. Reproductive Methyl ethyl ketone and cyclohexanone have been shown to cause Toxicity: embryofetal toxicity and birth defects in laboratory animals. Acetone and tetrahydrofuran have been found to cause adverse developmental effects only when exposure levels cause other toxic effects to the mother. Medical Persons with pre-existing skin, lung, kidney or liver disorders Conditions may be at increased risk from exposure to this product.

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Aggravated By Exposure:

SECTION 14 TRANSPORTATION INFORMATION

DOT Less than 1 Liter (0.3 gal) Greater than 1 Liter (0.3 gal)

Proper Shipping Name: Consumer Commodity Adhesives Hazard Class/Packing Group: ORM-D 3, PGII UN/NA Number: None UN1133

Flammable Liquid Hazard Labels: None

TMDG

Proper Shipping Name: Adhesives Adhesives Hazard Class/Packing Group: 3, II 3, II UN Number: UN1133 UN1133

Label: None (Limited Quantities Class 3 (Flammable

> are excepted Liquid)

from labeling)

RCRA Hazardous Waste Number: U002, U057, U213 EPA Hazardous Waste ID Number: D001, D035, F003, F005

EPA Hazard Waste Class: Ignitable Waste. Toxic Waste (Methyl Ethyl Ketone content)

under SARA Section 302.

2000 North American Emergency Response Guidebook Number: 127 or 128

SECTION 15 REGULATIONS

Hazard Category for Section

311/312:

Section 302 Extremely

Section 313 Toxic Chemicals: This product contains the following chemicals

Hazardous Substances (TPQ):

subject to SARA Title III Section 313 Reporting requirements:

Chemical CAS # Methyl Ethyl Ketone 78-93-3 30-48%

Acute Health, Chronic Health, Flammable

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 (40% maximum) of 1,000 lbs, is 2,500

This product does not contain chemicals regulated

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 California to cause cancer. Under normal use conditions, exposures 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 9 to minimize exposure

to these chemicals.

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

the TSCA inventory.

SECTION 16 DISCLAIMER

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

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