CARLON RESI-GARD PVC SOLVENT CEMENT

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Section 1 **IDENTITY OF MATERIAL**

TRADE NAME	CARLON RESI-GARD CEMENT
PRODUCT NUMBERS	VC9963SC
FORMULA	PVC Resin in Solvent Solution
SYNONYMS	PVC Plastic Pipe Cement
FIRM NAME & MAILING ADDRESS	LAMSON & SESSIONS c/o OATEY CO., 4700 West 160th Street, P.O. Box 35906 Cleveland, Ohio 44135 U.S.A.
OATEY PHONE NUMBER	1-216-267-7100
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
PREPARED BY	Charles N. Bush, Ph.D.

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SECTION 2 **HAZARDOUS INGREDIENTS**

INGREDIENTS	%	CAS NUMBER	SEC 313
PVC Resin (Non-Hazardous)	10-15%	9002-86-2	No
Methyl Ethyl Ketone	30-48%	78-93-3	Yes
Tetrahydrofuran (See SECTION 6)	30-40%	109-99-9	No
Cyclohexanone	5-10%	108-94-1	No
Amorphous Silica	1-4%	112945-52-5	No
Acetone	<2%	67-64-1	No

SECTION 3 **KNOWN HAZARDS UNDER U.S. 29 CFR 1910.1200**

HAZARDS	YES	NO	HAZARDS	YES	NO
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 11)		x			

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

SKIN	If irritation arises, wash thoroughly with soap and water. Seek medical attention if irritation persists. Remove dried cement with Oatey Plumber's Hand Cleaner or baby oil.
EYES	If fumes cause irritation, move to fresh air and irrigate eyes with water for 15 minutes. If irritation persists, 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	**DO NOT INDUCE VOMITING.** This product may be aspirated into the lungs and cause chemical pneumonitis, a potentially fatal condition. Drink water and call a poison control center or physician immediately. Avoid alcoholic beverages. Never give anything by mouth to an unconscious person.

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SECTION 5 **FIRE FIGHTING MEASURES AND EXPLOSION HAZARD DATA**

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.

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SECTION 6 **ACCIDENTAL RELEASE MEASURES**

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.

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SECTION 7 **HANDLING AND STORAGE**

PRECAUTIONS	HANDLING & STORAGE: Keep away from heat, sparks and flames; store in cool, dry place. OTHER: Containers, even empties will retain residue and flammable vapors.

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SECTION 8 **EXPOSURE CONTROLS/PERSONAL PROTECTION**

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	LOCAL EXHAUST: Open doors & windows. Exhaust ventilation capable of maintaining emissions at the point of use below PEL. If used in enclosed area, use exhaust fans. Exhaust fans should be explosion-proof or set up in a way that explosive concentrations of solvent vapors are not exposed to electrical fixtures or hot surfaces.

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SECTION 9 **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	84-88%
SOLUBILITY IN WATER	Negligible
PH	N/A
SPECIFIC GRAVITY	0.90 +/- 0.02
EVAPORATION RATE	(n-butyl acetate = 1) = 5.5 - 8.0
APPEARANCE	Milky Liquid
ODOR	Ether-Like
WILL DISSOLVE IN	Tetrahydrofuran
MATERIAL IS	Liquid

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SECTION 10 **STABILITY AND REACTIVITY**

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 DECOMPOSITION PRODUCTS: 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.

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SECTION 11 **TOXICOLOGICAL INFORMATION**

ENTRY ROUTE	INHALE - YES INGEST - YES SKIN - YES EYE - YES
INHALATION	**Avoid breathing vapors.** High vapor concentrations may cause irritation of mucous membranes, nose & throat, headache, dizziness, nausea, numbness of the extremities and narcosis in high concentrations. Some solvents at concentrations much higher than the OSHA PEL's have caused CNS depression & liver damage in animals and/or retardation of fetal development in rats. Vapor concentrations above OSHA PEL's will generally not occur unless the product is being used in an enclosed area with no ventilation. See Section 8.
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.
TARGET ORGANS.	Eye, Skin, Kidney, Lung, Liver, Central Nervous System
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 the lungs or cause systemic effects described under inhalation.

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SECTION 12 **ECOLOGICAL INFORMATION**

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.

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SECTION 13 **DISPOSAL INFORMATION**

WASTE DISPOSAL Dispose of according to local, state, and Federal regulations. Residual material after solvent evaporation is non-hazardous. Empty cans are considered non-hazardous.

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SECTION 14 **TRANSPORTATION INFORMATION**

DOT PROPER SHIPPING NAME	CONSUMER COMMODITY ORM-D; For Gallons: Adhesives, 3, UN1133, PG II
DOT HAZARD CLASS	Class 3 Flammable Liquid
SHIPPING ID NUMBER	UN 1133 (Gallons Only)
EPA HAZARDOUS WASTE ID NUMBER	D-001
EPA HAZARD WASTE CLASS	Ignitable Waste/Toxic Waste

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SECTION 15 **REGULATIONS**

CHEMICAL	TLV (TWA)	PEL	STEL	Hazard Action Level
Methyl Ethyl Ketone	200 ppm 590 mg/cu m	200 ppm 590 mg/cu m	300 ppm 885 mg/cu m	N/A
Tetrahydrofuran	200 ppm 590 mg/cu m	200 ppm 590 mg/cu m	250 ppm 735 mg/cu m	N/A
Cyclohexanone	25 ppm 100 mg/cu m	50 ppm 200 mg/cu m	N/A	N/A
Amorphous Silica	10 mg/cu m	20 mppcf	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

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SECTION 16 **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.