

Issue Date 01-Jun-2010

Revision Date: 02-Oct-2013

1. IDENTIFICATION

Product Identifier Product Name	PVC- PVC Cement	
Other means of identification SDS #	PVC	
UN/ID No Product Code	UN1133 PVC-8, PVC-16	
Recommended use of the chemical	and restrictions on use	
Recommended Use	Low-VOC solvent cement for PVC	
Details of the supplier of the safety data sheet Distributed By: Atlantic Chemical & Equipment Co. 3471 Atlanta Industrial Pkwy – Ste 200		

3471 Atlanta Industrial Pkwy – Ste 2 Atlanta, GA 30331 USA

Emergency Telephone Number	
Company Phone Number	
Emergency Telephone (24 hr)	

1-800-929-2436 INFOTRAC 1-800-535-5053

2. HAZARDS IDENTIFICATION

plastic pipe

Appearance Liquid of various colors

Physical State Liquid

Odor Ether-like

Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable Liquids	Category 2

Hazards Not Otherwise Classified (HNOC)

May be harmful in contact with skin

Signal Word Danger

Hazard Statements

Harmful if swallowed Harmful if inhaled Causes serious eye irritation May cause respiratory irritation. May cause drowsiness or dizziness

Highly flammable liquid and vapor



Precautionary Statements - Prevention

Use personal protective equipment as required Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Keep away from heat/sparks/open flames/hot surfaces. — No smoking Keep container tightly closed Ground/bond container and receiving equipment Use explosion-proof equipment Use only non-sparking tools Take precautionary measures against static discharge Wear protective gloves/protective clothing/eye protection/face protection Keep cool

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth IN CASE OF FIRE: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed Store locked up Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

WHMIS Classification

Class B-Division 2 Class D-Division 2A Class D-Division 2B

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Tetrahydrofuran	109-99-9	Proprietary
Methyl ethyl ketone	78-93-3	Proprietary
Cyclohexanone	108-94-1	Proprietary
Acetone	67-64-1	Proprietary
PVC Resin	9002-86-2	Proprietary

* The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST-AID MEASURES

First Aid Measures

General Advice	If exposed or concerned: Get medical advice/attention.	
Eye Contact	In case of irritation from airborne exposure, move to fresh air. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek immediate medical attention/advice.	
Skin Contact	Take off contaminated clothing. Wash with soap and water. If symptoms persist, call a physician. Wash contaminated clothing before reuse.	
Inhalation	Remove to fresh air. If symptoms persist, call a physician. If breathing is difficult, give oxygen. Seek immediate medical attention/advice.	
Ingestion	Rinse mouth. Seek medical attention. If drowsy or unconscious, do not give anything by mouth; place individual on the left side with head down. Do not induce vomiting.	
Most important symptoms and effe	<u>cts</u>	
Symptoms	Exposed individuals may experience eye tearing, redness and discomfort. Prolonged or repeated skin contact may result in dermatitis (red, dry skin). May cause nose and throat irritation, with possible central nervous system effects. Fatigue and weakness. May cause drowsiness or dizziness. Long term overexposure may cause liver and kidney damage.	
Indication of any immediate medical attention and special treatment needed		
Notes to Physician	Treat symptomatically. Individuals with chronic respiratory, skin, kidney, or liver disorders may be at increased risk from exposure.	

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam. Carbon dioxide (CO2). Dry chemical.

Unsuitable Extinguishing Media Not determined.

<u>Specific Hazards Arising from the Chemical</u> Class IB Flammable Liquid. Vapors may travel to source of ignition and flash back.

Hazardous Combustion Products Carbon oxides. Various hydrocarbon vapors and toxic gases.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protective equipment as required. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Persons not wearing proper personal protective equipment should be excluded from area of spill.	
Environmental Precautions	Do not allow into any sewer, on the ground or into any body of water.	
Methods and material for containment and cleaning up		
Methods for Containment	Prevent further leakage or spillage if safe to do so.	
Methods for Clean-Up	Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal.	

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling	Wash thoroughly after handling. Use personal protection recommended in Section 8. Do not eat, drink or smoke when using this product. Avoid breathing vapors or mists. Use only in well-ventilated areas. Ground/bond container and receiving equipment. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static discharges. Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, solid) all hazard precautions given in the data sheet must be observed. Avoid prolonged contact with eyes, skin, and clothing. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.	
Conditions for safe storage, including any incompatibilities		
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store containers upright. Store away from heat, sparks, flame.	

Incompatible Materials Oxidizers. Acids. Bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Tetrahydrofuran 109-99-9	STEL: 100 ppm TWA: 50 ppm S*	TWA: 200 ppm TWA: 590 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 590 mg/m ³	IDLH: 2000 ppm TWA: 200 ppm TWA: 590 mg/m ³ STEL: 250 ppm
		(vacated) STEL: 250 ppm (vacated) STEL: 735 mg/m ³	STEL: 735 mg/m ³
Acetone 67-64-1	STEL: 750 ppm TWA: 500 ppm	TWA: 1000 ppm TWA: 2400 mg/m ³ (vacated) TWA: 750 ppm (vacated) TWA: 1800 mg/m ³ (vacated) STEL: 2400 mg/m ³ The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors (vacated) STEL: 1000 ppm	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m ³

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Methyl ethyl ketone 78-93-3	STEL: 300 ppm TWA: 200 ppm	TWA: 200 ppm TWA: 590 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 590 mg/m ³ (vacated) STEL: 300 ppm (vacated) STEL: 885 mg/m ³	IDLH: 3000 ppm TWA: 200 ppm TWA: 590 mg/m ³ STEL: 300 ppm STEL: 885 mg/m ³
Cyclohexanone 108-94-1	STEL: 50 ppm TWA: 20 ppm S*	TWA: 50 ppm TWA: 200 mg/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 100 mg/m ³ (vacated) S*	IDLH: 700 ppm TWA: 25 ppm TWA: 100 mg/m ³
PVC Resin 9002-86-2	TWA: 1 mg/m ³ respirable fraction		-

Appropriate engineering controls

Engineering Controls	Apply technical measures to comply with the occupational exposure limits. Ventilation		
	systems. Eyewash stations. Showers. Mechanical exhaust (explosion proof) may be		
	required.		

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Splash goggles or safety glasses.
Skin and Body Protection	Rubber gloves. Use body protection appropriate for task.
Respiratory Protection	Not required under normal conditions. If recommended levels are exceeded, respiratory protection must be selected to assure compliance with OSHA Standard 29CFR 1910.134.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Appearance Color	Liquid Liquid Clear	Odor Odor Threshold	Ether-like 0.88 ppm
<u>Property</u> pH Melting Point/Freezing Point Boiling Point/Boiling Range Flash Point	<u>Values</u> Not available -108 °C / -163 °F 56 °C / 133 °F -20 °C / -4 °F	Remarks • Method	
Evaporation Rate Flammability (Solid, Gas) Upper Flammability Limits Lower Flammability Limit	> 1.0 n/a-liquid 12.8% 1.8%	(butyl acetate = 1)	
Vapour Pressure Vapor Density Specific Gravity Water Solubility Solubility in other solvents	190 mm Hg 2.5 0.890 Negligible Not determined	@ 20°C (68°F) (Air=1)	
Partition Coefficient Auto-ignition Temperature Decomposition Temperature Kinematic Viscosity Dynamic Viscosity Explosive Properties Oxidizing Properties VOC Content	Not determined 321 °C / 610 °F Not determined Not determined Not determined Not determined Not determined Maximum VOC emissions when appl 316A is <= 510 g/L	Not determined	/ID Rule 1168, Test Method

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Avoid heat, sparks, open flames and other ignition sources.

Incompatible Materials

Oxidizers. Acids. Bases.

Hazardous Decomposition Products

Carbon oxides. Hydrogen chloride. Other various hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	
Eye Contact	Causes serious eye irritation.
Skin Contact	May be harmful in contact with skin.
Inhalation	Harmful if inhaled.
Ingestion	Harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Tetrahydrofuran 109-99-9	= 1650 mg/kg(Rat)	-	= 53.9 mg/L (Rat)4 h = 180 mg/L (Rat)1 h
Acetone 67-64-1	= 5800 mg/kg (Rat)	-	-
Methyl ethyl ketone 78-93-3	= 2737 mg/kg (Rat)	= 6480 mg/kg (Rabbit)	-
Cyclohexanone 108-94-1	= 800 mg/kg (Rat)	= 948 mg/kg (Rabbit)	= 10.7 mg/L (Rat)4 h = 8000 ppm (Rat)4 h

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

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Chemical Name	ACGIH	IARC	NTP	OSHA
Tetrahydrofuran 109-99-9	A3			
Cyclohexanone 108-94-1	A3	Group 3		
PVC Resin 9002-86-2		Group 3		

Legend

ACGIH (American Conference of Governmental Industrial Hygienists) A3 - Animal Carcinogen IARC (International Agency for Research on Cancer) Group 3 IARC components are "not classifiable as human carcinogens"

STOT - single exposure

May cause respiratory irritation. May cause drowsiness or dizziness.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Category IV

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Tetrahydrofuran 109-99-9		1970 - 2360: 96 h Pimephales promelas mg/L LC50 flow-through 2700 - 3600: 96 h Pimephales promelas mg/L LC50 static		5930: 24 h Daphnia magna mg/L EC50
Acetone 67-64-1		4.74 - 6.33: 96 h Oncorhynchus mykiss mL/L LC50 6210 - 8120: 96 h Pimephales promelas mg/L LC50 static 8300: 96 h Lepomis macrochirus mg/L LC50	EC50 = 14500 mg/L 15 min	10294 - 17704: 48 h Daphnia magna mg/L EC50 Static 12600 - 12700: 48 h Daphnia magna mg/L EC50
Methyl ethyl ketone 78-93-3		3130 - 3320: 96 h Pimephales promelas mg/L LC50 flow-through	EC50 = 3403 mg/L 30 min EC50 = 3426 mg/L 5 min	520: 48 h Daphnia magna mg/L EC50 5091: 48 h Daphnia magna mg/L EC50 4025 - 6440: 48 h Daphnia magna mg/L EC50 Static
Cyclohexanone 108-94-1	20: 96 h Chlorella vulgaris mg/L EC50	481 - 578: 96 h Pimephales promelas mg/L LC50 flow- through 8.9: 96 h Pimephales promelas mg/L LC50	EC50 = 18.5 mg/L 5 min EC50 = 21.3 mg/L 10 min EC50 = 25 mg/L 5 min	800: 24 h Daphnia magna mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Tetrahydrofuran 109-99-9	0.45
Methyl ethyl ketone 78-93-3	0.29
Cyclohexanone 108-94-1	0.86

Acetone	
67-64-1	

-0.24

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Tetrahydrofuran 109-99-9				U213
Acetone 67-64-1		Included in waste stream: F039		U002
Methyl ethyl ketone 78-93-3	U159	Included in waste streams: F005, F039	200.0 mg/L regulatory level	U159
Cyclohexanone 108-94-1		Included in waste stream: F039		U057

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Tetrahydrofuran	Toxic
109-99-9	Ignitable
Methyl ethyl ketone	Toxic
78-93-3	Ignitable
Acetone 67-64-1	Ignitable

14. TRANSPORT INFORMATION

Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances. Shipments of containers holding 5 Liters or less per inner packaging may qualify for a "Limited Quantity" exception. Refer to 49 CFR 173.150 for additional information.

DOT	
UN/ID No	UN1133
Proper Shipping Name	Adhesives
Hazard Class	3
Packing Group	II
ΙΑΤΑ	
UN/ID No	UN1133

UN/ID No	UN1133
Proper Shipping Name	Adhesives
Hazard Class	3
Packing Group	II

IMDG

UN/ID No	UN1133
Proper Shipping Name	Adhesives
Hazard Class	3
Packing Group	II
Marine Pollutant	No

15. REGULATORY INFORMATION

International Inventories

TSCA

Listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Tetrahydrofuran	1000 lb		RQ 1000 lb final RQ
109-99-9			RQ 454 kg final RQ
Methyl ethyl ketone	5000 lb		RQ 5000 lb final RQ
78-93-3			RQ 2270 kg final RQ
Cyclohexanone	5000 lb		RQ 5000 lb final RQ
108-94-1			RQ 2270 kg final RQ
Acetone	5000 lb		RQ 5000 lb final RQ
67-64-1			RQ 2270 kg final RQ

<u>SARA 313</u>

Not determined

US State Regulations

California Proposition 65

This product may contain trace levels of chemicals known to the State of California to cause cancer. Exposure to these chemicals above the State of California 'No Significant Risk Level' is unlikely under normal use conditions.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Tetrahydrofuran 109-99-9	Х	Х	Х
Acetone 67-64-1	Х	X	Х
Methyl ethyl ketone 78-93-3	Х	Х	Х
Cyclohexanone 108-94-1	Х	X	Х

PVC Resin	X	
9002-86-2		

16. OTHER INFORMATION						
<u>NFPA</u>	Health Hazards	Flammability 3	Instability 1	Special Hazards None		
<u>HMIS</u>	Health Hazards	Flammability 3	Physical Hazards 1	Personal Protection G		
Issue Date Revision Date: Revision Note	01-Jun-2010 02-Oct-2013 New format					

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet