ABS & PVC Cement

Safety Data Sheet

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SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: ABS & PVC Cement

Product Code: PV16CL, PV16GR, PV32CL, PV32GR

1.2. Intended Use of the Product

Low VOC Solvent Cement for PVC Plastic Pipe

1.3. Name, Address, and Telephone of the Responsible Party

L.H. Dottie Company
6131 Garfield Ave.
Commerce, CA 90040 USA
Ph: 323-725-1000
www.lhdottie.com

1.4. Emergency Telephone Number

Emergency Number : VelocityEHS
(800)255-3924 (North America)
+1 (813)248-0585 (International)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US/CA Classification

Flammable liquids Category 2	H225
Acute toxicity (oral) Category 4	H302
Skin corrosion/irritation Category 2	H315
Serious eye damage/eye irritation Category 1	H318
Carcinogenicity Category 2	H351
Specific target organ toxicity — Single exposure, Category 3, Narcosis	H336
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335
Hazardous to the aquatic environment - Acute Hazard Category 2	H401
Hazardous to the aquatic environment - Chronic Hazard Category 2	H411

2.2. Label Elements

GHS-US/CA Labeling

Hazard Pictograms (GHS-US/CA) :

Signal Word (GHS-US/CA) : Danger

Hazard Statements (GHS-US/CA) : H225 - Highly flammable liquid and vapor.
H302 - Harmful if swallowed.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H335 - May cause respiratory irritation.
H336 - May cause drowsiness or dizziness.
H351 - Suspected of causing cancer.
H401 - Toxic to aquatic life.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary Statements (GHS-US/CA) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 - Keep container tightly closed.
P240 - Ground/bond container and receiving equipment.
P241 - Use explosion-proof electrical, ventilating, and lighting equipment.
P242 - Use only non-sparking tools.
P243 - Take action to prevent static discharges.
P261 - Avoid breathing vapors, mist, or spray.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, and eye protection.
P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P321 - Specific treatment (see section 4 on this SDS).
P330 - Rinse mouth.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use appropriate media (see section 5) to extinguish.
P391 - Collect spillage.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US/CA)

No additional information available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Synonyms	Product Identifier	% *	GHS Ingredient Classification
Methyl ethyl ketone	Butan-2-one / 2-Butanone / Ethyl methyl ketone / Methyl acetone / MEK / Butanone / methyl ethyl ketone	(CAS-No.) 78-93-3	15 - 40	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Tetrahydrofuran	Butane, 1,4-epoxy- / Cyclotetramethylene oxide / Diethylene oxide / 1,4-Epoxybutane / Furan, tetrahydro- / Oxacyclopentane / Butylene oxide / THF	(CAS-No.) 109-99-9	10 – 30	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:vapor), H332 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336 STOT SE 3, H335
Cyclohexanone	Anon / CYCLOHEXANONE / Sextone / Cyclohexyl ketone	(CAS-No.) 108-94-1	15 - 40	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312

				Acute Tox. 4 (Inhalation:gas), H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
Acetone	Dimethyl ketone / 2-Propanone / ACETONE / Propan-2-one / Propanone	(CAS-No.) 67-64-1	7 - 30	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336

* The actual concentration of ingredient(s) is withheld as a trade secret in accordance with the Hazardous Products Regulations (HPR) SOR/2015-17 and 29 CFR 1910.1200. Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%). Full text of H-statements: see section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Immediately remove contaminated clothing. Immediately drench affected area with water for at least 15 minutes. If exposed or concerned: Get medical advice/attention.

Eye Contact: Immediately rinse with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: May cause respiratory irritation. May cause drowsiness and dizziness. Causes skin irritation. Suspected of causing cancer. Harmful if swallowed. Causes serious eye damage.

Inhalation: Irritation of the respiratory tract and the other mucous membranes. High concentrations may cause central nervous system depression such as dizziness, vomiting, numbness, drowsiness, headache, and similar narcotic symptoms.

Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts.

Chronic Symptoms: Suspected of causing cancer. Repeated exposure may cause skin dryness or cracking. Repeated or prolonged skin contact may cause dermatitis and defatting.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO_2). Water may be ineffective but water should be used to keep fire-exposed container cool.

Unsuitable Extinguishing Media: Do not use a heavy water stream. A heavy water stream may spread burning liquid.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Highly flammable liquid and vapor.

Explosion Hazard: May form flammable or explosive vapor-air mixture.

Reactivity: Reacts violently with strong oxidizers. Increased risk of fire or explosion. May react with reducing agents and an ignition source to create explosive mixtures. Tetrahydrofuran will explode on contact with hydrides.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Smoke. Carbon oxides (CO, CO_2). Peroxides.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

5.4. Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not get in eyes, on skin, or on clothing. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Use special care to avoid static electric charges. Do not breathe vapor, mist or spray.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel. Stop leak if safe to do so.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Eliminate ignition sources first, then ventilate the area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Remove ignition sources. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Do not take up in combustible material such as: saw dust or cellulosic material. Use only non-sparking tools. Absorb and/or contain spill with inert material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Handle empty containers with care because residual vapors are flammable.

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Take precautionary measures against static discharge. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do not breathe vapors, spray, mist. Handle empty containers with care because they may still present a hazard.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Take action to prevent static discharges. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment.

Storage Conditions: Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area. Store in a well-ventilated place. Keep container tightly closed. Keep in fireproof place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Reducing agents. Oxidizing agent. Some plastics. Halogens. Acids.

7.3. Specific End Use(s)

Low VOC Solvent Cement for PVC Plastic Pipe

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

Tetrahydrofuran (109-99-9)		
USA ACGIH	ACGIH OEL TWA [ppm]	50 ppm
USA ACGIH	ACGIH OEL STEL [ppm]	100 ppm
USA ACGIH	ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans,Skin - potential significant contribution to overall

		exposure by the cutaneous route
USA ACGIH	BEI (BLV)	2 mg/L Parameter: Tetrahydrofuran - Medium: urine - Sampling time: end of shift
USA OSHA	OSHA PEL (TWA) [1]	590 mg/m³
USA OSHA	OSHA PEL (TWA) [2]	200 ppm
USA NIOSH	NIOSH REL (TWA)	590 mg/m³
USA NIOSH	NIOSH REL TWA [ppm]	200 ppm
USA NIOSH	NIOSH REL (STEL)	735 mg/m³
USA NIOSH	NIOSH REL STEL [ppm]	250 ppm
USA IDLH	IDLH [ppm]	2000 ppm (10% LEL)
Alberta	OEL STEL	295 mg/m³
Alberta	OEL STEL [ppm]	100 ppm
Alberta	OEL TWA	147 mg/m³
Alberta	OEL TWA [ppm]	50 ppm
British Columbia	OEL STEL [ppm]	100 ppm
British Columbia	OEL TWA [ppm]	50 ppm
Manitoba	OEL STEL [ppm]	100 ppm
Manitoba	OEL TWA [ppm]	50 ppm
New Brunswick	OEL STEL	737 mg/m³
New Brunswick	OEL STEL [ppm]	250 ppm
New Brunswick	OEL TWA	590 mg/m³
New Brunswick	OEL TWA [ppm]	200 ppm
Newfoundland & Labrador	OEL STEL [ppm]	100 ppm
Newfoundland & Labrador	OEL TWA [ppm]	50 ppm
Nova Scotia	OEL STEL [ppm]	100 ppm
Nova Scotia	OEL TWA [ppm]	50 ppm
Nunavut	OEL STEL [ppm]	100 ppm
Nunavut	OEL TWA [ppm]	50 ppm
Northwest Territories	OEL STEL [ppm]	100 ppm
Northwest Territories	OEL TWA [ppm]	50 ppm
Ontario	OEL STEL [ppm]	100 ppm
Ontario	OEL TWA [ppm]	50 ppm
Prince Edward Island	OEL STEL [ppm]	100 ppm
Prince Edward Island	OEL TWA [ppm]	50 ppm
Québec	VEMP (OEL TWA)	300 mg/m³
Québec	VEMP (OEL TWA) [ppm]	100 ppm
Saskatchewan	OEL STEL [ppm]	100 ppm
Saskatchewan	OEL TWA [ppm]	50 ppm
Yukon	OEL STEL	700 mg/m³
Yukon	OEL STEL [ppm]	250 ppm
Yukon	OEL TWA	590 mg/m³
Yukon	OEL TWA [ppm]	200 ppm

Methyl ethyl ketone (78-93-3)		
USA ACGIH	ACGIH OEL TWA [ppm]	200 ppm
USA ACGIH	ACGIH OEL STEL [ppm]	300 ppm
USA ACGIH	BEI (BLV)	2 mg/L Parameter: MEK - Medium: urine - Sampling time: end of shift (nonspecific)
USA OSHA	OSHA PEL (TWA) [1]	590 mg/m³
USA OSHA	OSHA PEL (TWA) [2]	200 ppm
USA NIOSH	NIOSH REL (TWA)	590 mg/m³
USA NIOSH	NIOSH REL TWA [ppm]	200 ppm

USA NIOSH	NIOSH REL (STEL)	885 mg/m³
USA NIOSH	NIOSH REL STEL [ppm]	300 ppm
USA IDLH	IDLH [ppm]	3000 ppm
Alberta	OEL STEL	885 mg/m³
Alberta	OEL STEL [ppm]	300 ppm
Alberta	OEL TWA	590 mg/m³
Alberta	OEL TWA [ppm]	200 ppm
British Columbia	OEL STEL [ppm]	100 ppm
British Columbia	OEL TWA [ppm]	50 ppm
Manitoba	OEL STEL [ppm]	300 ppm
Manitoba	OEL TWA [ppm]	200 ppm
New Brunswick	OEL STEL	885 mg/m³
New Brunswick	OEL STEL [ppm]	300 ppm
New Brunswick	OEL TWA	590 mg/m³
New Brunswick	OEL TWA [ppm]	200 ppm
Newfoundland & Labrador	OEL STEL [ppm]	300 ppm
Newfoundland & Labrador	OEL TWA [ppm]	200 ppm
Nova Scotia	OEL STEL [ppm]	300 ppm
Nova Scotia	OEL TWA [ppm]	200 ppm
Nunavut	OEL STEL [ppm]	300 ppm
Nunavut	OEL TWA [ppm]	200 ppm
Northwest Territories	OEL STEL [ppm]	300 ppm
Northwest Territories	OEL TWA [ppm]	200 ppm
Ontario	OEL STEL [ppm]	300 ppm
Ontario	OEL TWA [ppm]	200 ppm
Prince Edward Island	OEL STEL [ppm]	300 ppm
Prince Edward Island	OEL TWA [ppm]	200 ppm
Québec	VECD (OEL STEL)	300 mg/m³
Québec	VECD (OEL STEL) [ppm]	100 ppm
Québec	VEMP (OEL TWA)	150 mg/m³
Québec	VEMP (OEL TWA) [ppm]	50 ppm
Saskatchewan	OEL STEL [ppm]	300 ppm
Saskatchewan	OEL TWA [ppm]	200 ppm
Yukon	OEL STEL	740 mg/m³
Yukon	OEL STEL [ppm]	250 ppm
Yukon	OEL TWA	590 mg/m³
Yukon	OEL TWA [ppm]	200 ppm

Cyclohexanone (108-94-1)		
USA ACGIH	ACGIH OEL TWA [ppm]	20 ppm
USA ACGIH	ACGIH OEL STEL [ppm]	50 ppm
USA ACGIH	ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans,Skin - potential significant contribution to overall exposure by the cutaneous route
USA ACGIH	BEI (BLV)	80 mg/L Parameter: 1,2-Cyclohexanediol with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (nonspecific, semi-quantitative) 8 mg/L Parameter: Cyclohexanol with hydrolysis - Medium: urine - Sampling time: end of shift (nonspecific, semi-quantitative)
USA OSHA	OSHA PEL (TWA) [1]	200 mg/m³
USA OSHA	OSHA PEL (TWA) [2]	50 ppm
USA NIOSH	NIOSH REL (TWA)	100 mg/m³

USA NIOSH	NIOSH REL TWA [ppm]	25 ppm
USA IDLH	IDLH [ppm]	700 ppm
Alberta	OEL STEL	200 mg/m³
Alberta	OEL STEL [ppm]	50 ppm
Alberta	OEL TWA	80 mg/m³
Alberta	OEL TWA [ppm]	20 ppm
British Columbia	OEL STEL [ppm]	50 ppm
British Columbia	OEL TWA [ppm]	20 ppm
Manitoba	OEL STEL [ppm]	50 ppm
Manitoba	OEL TWA [ppm]	20 ppm
New Brunswick	OEL TWA	100 mg/m³
New Brunswick	OEL TWA [ppm]	25 ppm
Newfoundland & Labrador	OEL STEL [ppm]	50 ppm
Newfoundland & Labrador	OEL TWA [ppm]	20 ppm
Nova Scotia	OEL STEL [ppm]	50 ppm
Nova Scotia	OEL TWA [ppm]	20 ppm
Nunavut	OEL STEL [ppm]	50 ppm
Nunavut	OEL TWA [ppm]	20 ppm
Northwest Territories	OEL STEL [ppm]	50 ppm
Northwest Territories	OEL TWA [ppm]	20 ppm
Ontario	OEL STEL [ppm]	50 ppm
Ontario	OEL TWA [ppm]	20 ppm
Prince Edward Island	OEL STEL [ppm]	50 ppm
Prince Edward Island	OEL TWA [ppm]	20 ppm
Québec	VEMP (OEL TWA)	100 mg/m³
Québec	VEMP (OEL TWA) [ppm]	25 ppm
Saskatchewan	OEL STEL [ppm]	50 ppm
Saskatchewan	OEL TWA [ppm]	20 ppm
Yukon	OEL STEL	200 mg/m³
Yukon	OEL STEL [ppm]	50 ppm
Yukon	OEL TWA	200 mg/m³
Yukon	OEL TWA [ppm]	50 ppm

Acetone (67-64-1)		
USA ACGIH	ACGIH OEL TWA [ppm]	250 ppm
USA ACGIH	ACGIH OEL STEL [ppm]	500 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA ACGIH	BEI (BLV)	25 mg/L Parameter: Acetone - Medium: urine - Sampling time: end of shift (nonspecific)
USA OSHA	OSHA PEL (TWA) [1]	2400 mg/m³
USA OSHA	OSHA PEL (TWA) [2]	1000 ppm
USA NIOSH	NIOSH REL (TWA)	590 mg/m³
USA NIOSH	NIOSH REL TWA [ppm]	250 ppm
USA IDLH	IDLH [ppm]	2500 ppm (10% LEL)
Alberta	OEL STEL	1800 mg/m³
Alberta	OEL STEL [ppm]	750 ppm
Alberta	OEL TWA	1200 mg/m³
Alberta	OEL TWA [ppm]	500 ppm
British Columbia	OEL STEL [ppm]	500 ppm
British Columbia	OEL TWA [ppm]	250 ppm
Manitoba	OEL STEL [ppm]	500 ppm
Manitoba	OEL TWA [ppm]	250 ppm

New Brunswick	OEL STEL	1782 mg/m³
New Brunswick	OEL STEL [ppm]	750 ppm
New Brunswick	OEL TWA	1188 mg/m³
New Brunswick	OEL TWA [ppm]	500 ppm
Newfoundland & Labrador	OEL STEL [ppm]	500 ppm
Newfoundland & Labrador	OEL TWA [ppm]	250 ppm
Nova Scotia	OEL STEL [ppm]	500 ppm
Nova Scotia	OEL TWA [ppm]	250 ppm
Nunavut	OEL STEL [ppm]	750 ppm
Nunavut	OEL TWA [ppm]	500 ppm
Northwest Territories	OEL STEL [ppm]	750 ppm
Northwest Territories	OEL TWA [ppm]	500 ppm
Ontario	OEL STEL [ppm]	500 ppm
Ontario	OEL TWA [ppm]	250 ppm
Prince Edward Island	OEL STEL [ppm]	500 ppm
Prince Edward Island	OEL TWA [ppm]	250 ppm
Québec	VECD (OEL STEL)	2380 mg/m³
Québec	VECD (OEL STEL) [ppm]	1000 ppm
Québec	VEMP (OEL TWA)	1190 mg/m³
Québec	VEMP (OEL TWA) [ppm]	500 ppm
Saskatchewan	OEL STEL [ppm]	750 ppm
Saskatchewan	OEL TWA [ppm]	500 ppm
Yukon	OEL STEL	3000 mg/m³
Yukon	OEL STEL [ppm]	1250 ppm
Yukon	OEL TWA	2400 mg/m³
Yukon	OEL TWA [ppm]	1000 ppm

8.2. Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases or vapors may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.

Materials for Protective Clothing: Chemically resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles. Faceshield as determined by task.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	:	Liquid
Appearance	:	Clear or gray, medium syrupy
Odor	:	Ketone
Odor Threshold	:	0.88 ppm (Cyclohexanone)
pH	:	No data available
Evaporation Rate	:	> 1 (BUAC = 1)

Melting Point	:	-108.5 °C (-163.3 °F) Based on first melting component: THF
Freezing Point	:	-108.5 °C (-163.3 °F) Based on first melting component: THF
Boiling Point	:	56 – 156 °C (132.8 – 312.8 °F) Based on first boiling component: Acetone
Flash Point	:	-20 °C (-4 °F) TCC based on Acetone
Auto-ignition Temperature	:	321 °C (609.8 °F) based on THF
Decomposition Temperature	:	No data available
Flammability	:	Not applicable
Lower Flammable Limit	:	1.1 % based on Cyclohexanone
Upper Flammable Limit	:	12.8 % based on Acetone
Vapor Pressure	:	190 mm Hg @ 20°C (68°F) Acetone
Relative Vapor Density at 20°C	:	No data available
Relative Density	:	No data available
Specific Gravity	:	0.92 @23°C (73°F)
Solubility	:	Solvent portion soluble in water.
Partition Coefficient: N-Octanol/Water	:	No data available
Viscosity	:	No data available
VOC content	:	< 510 g/L When applied as directed, per SCAQMD Rule 1168, Test Method 316A

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:

Reacts violently with strong oxidizers. Increased risk of fire or explosion. May react with reducing agents and an ignition source to create explosive mixtures. Tetrahydrofuran will explode on contact with hydrides.

10.2. Chemical Stability:

Highly flammable liquid and vapor. May form flammable or explosive vapor-air mixture. May form explosive peroxides.

10.3. Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

10.4. Conditions to Avoid:

Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.

10.5. Incompatible Materials:

Strong acids, strong bases, strong oxidizers. Reducing agents. Oxidizing agent. Some plastics. Halogens. Acids.

10.6. Hazardous Decomposition Products:

Thermal decomposition may produce: Smoke and carbon oxides. . Upon contact with air, THF may decompose into explosive peroxides & carbon monoxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity (Oral): Harmful if swallowed.

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data:

ABS & PVC Cement	
ATE US/CA (oral)	1,893.59 mg/kg body weight

Skin Corrosion/Irritation: Causes skin irritation.

Eye Damage/Irritation: Causes serious eye damage.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Suspected of causing cancer.

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause drowsiness or dizziness. May cause respiratory irritation.

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Irritation of the respiratory tract and the other mucous membranes. High concentrations may cause central nervous system depression such as dizziness, vomiting, numbness, drowsiness, headache, and similar narcotic symptoms.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Injuries After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Injuries After Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts.

Chronic Symptoms: Suspected of causing cancer,Repeated exposure may cause skin dryness or cracking,Repeated or prolonged skin contact may cause dermatitis and defatting

Potential Adverse human health effects and symptoms: Based on available data, the classification criteria are not met. Harmful if swallowed.

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Tetrahydrofuran (109-99-9)	
LD50 Oral Rat	1650 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
LC50 Inhalation Rat	> 14.7 mg/L/4h
LC50 Inhalation Rat	53.6 mg/L/4h
ATE US/CA (vapors)	11.00 mg/L/4h

Methyl ethyl ketone (78-93-3)	
LD50 Oral Rat	2483 mg/kg
LD50 Dermal Rat	> 10 ml/kg
LD50 Dermal Rabbit	5000 mg/kg
LC50 Inhalation Rat	34.5 mg/L/4h
LC50 Inhalation Rat	11700 ppm/4h

Cyclohexanone (108-94-1)	
LD50 Oral Rat	1620 mg/kg
LD50 Dermal Rabbit	947 mg/kg
LC50 Inhalation Rat	> 6.2 mg/L/4h
LC50 Inhalation Rat	8000 ppm/4h

Acetone (67-64-1)	
LD50 Oral Rat	5800 mg/kg (Species: Sprague-Dawley)
LD50 Dermal Rabbit	7400 mg/kg
LC50 Inhalation Rat	44 g/m³

Tetrahydrofuran (109-99-9)	
IARC Group	2B
National Toxicology Program (NTP) Status	Evidence of Carcinogenicity.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

Cyclohexanone (108-94-1)	
IARC Group	3

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Toxic to aquatic life with long lasting effects.

Tetrahydrofuran (109-99-9)	
LC50 Fish 1	1970 (1970 – 2360) mg/L (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 - Crustacea [1]	5930 mg/L
LC50 Fish 2	2700 (2700 – 3600) mg/L (Exposure time: 96 h - Species: Pimephales promelas [static])
NOEC Chronic Fish	216 mg/L

Methyl ethyl ketone (78-93-3)	
LC50 Fish 1	3130 (3130 – 3320) mg/L (Exposure time: 96 h - Species: Pimephales promelas [flow-

	through])
EC50 - Crustacea [1]	520 mg/L (Exposure time: 48 h - Species: Daphnia magna)
EC50 - Crustacea [2]	5091 mg/L (Exposure time: 48 h - Species: Daphnia magna)
NOEC Chronic Algae	93 mg/L

Cyclohexanone (108-94-1)	
LC50 Fish 1	481 (481 – 578) mg/L (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 - Crustacea [1]	800 mg/L
LC50 Fish 2	8.9 mg/L (Exposure time: 96 h - Species: Pimephales promelas)

Acetone (67-64-1)	
LC50 Fish 1	4144.846 mg/L (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 - Crustacea [1]	1679.66 mg/L (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 Fish 2	6210 (6210 – 8120) mg/L (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 - Crustacea [2]	12600 (12600 – 12700) mg/L (Exposure time: 48 h - Species: Daphnia magna)

12.2. Persistence and Degradability

ABS & PVC Cement	
Persistence and Degradability	May cause long-term adverse effects in the environment.

Acetone (67-64-1)	
Persistence and Degradability	Readily biodegradable in water.

12.3. Bioaccumulative Potential

ABS & PVC Cement	
Bioaccumulative Potential	Not established.

Tetrahydrofuran (109-99-9)	
BCF Fish 1	(will not bioconcentrate)
Partition coefficient n-octanol/water (Log Pow)	0.45 at 25 °C (at pH 7)

Methyl ethyl ketone (78-93-3)	
Partition coefficient n-octanol/water (Log Pow)	0.3 at 40 °C (at pH 7)

Cyclohexanone (108-94-1)	
BCF Fish 1	(will not bioconcentrate)
Partition coefficient n-octanol/water (Log Pow)	0.86 at 25 °C

Acetone (67-64-1)	
BCF Fish 1	(0.69 dimensionless)
Partition coefficient n-octanol/water (Log Pow)	-0.24

12.4. Mobility in Soil

No additional information available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Treatment Methods: Incineration is the preferred method for disposal of waste product.

Sewage Disposal Recommendations: Do not dispose of waste into sewer. Do not empty into drains.

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Additional Information: Handle empty containers with care because residual vapors are flammable.

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT

Proper Shipping Name : ADHESIVES
Hazard Class : 3
Identification Number : UN1133
Label Codes : 3
Packing Group : II
Marine Pollutant : Marine pollutant
ERG Number : 128

14.2. In Accordance with IMDG

Proper Shipping Name : ADHESIVES
Hazard Class : 3
Identification Number : UN1133
Label Codes : 3
Packing Group : II
EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-D
Marine pollutant : Marine pollutant

14.3. In Accordance with IATA

Proper Shipping Name : ADHESIVES
Hazard Class : 3
Identification Number : UN1133
Label Codes : 3
Packing Group : II
ERG Code (IATA) : 3L

14.4. In Accordance with TDG

Proper Shipping Name : ADHESIVES
Hazard Class : 3
Identification Number : UN1133
Label Codes : 3
Packing Group : II
Marine Pollutant (TDG) : Marine pollutant

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

ABS & PVC Cement	
SARA Section 311/312 Hazard Classes	Health hazard - Specific target organ toxicity (single or repeated exposure) Health hazard - Skin corrosion or Irritation Physical hazard - Flammable (gases, aerosols, liquids, or solids) Health hazard - Carcinogenicity Health hazard - Acute toxicity (any route of exposure) Health hazard - Serious eye damage or eye irritation

Tetrahydrofuran (109-99-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
CERCLA RQ	1000 lb

Methyl ethyl ketone (78-93-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
CERCLA RQ	5000 lb

Cyclohexanone (108-94-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
CERCLA RQ	5000 lb

Acetone (67-64-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
CERCLA RQ 5000 lb

15.2. US State Regulations

Tetrahydrofuran (109-99-9)
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

Methyl ethyl ketone (78-93-3)
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

Cyclohexanone (108-94-1)
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

Acetone (67-64-1)
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

15.3. Canadian Regulations

Tetrahydrofuran (109-99-9)
Listed on the Canadian DSL (Domestic Substances List)

Methyl ethyl ketone (78-93-3)
Listed on the Canadian DSL (Domestic Substances List)

Cyclohexanone (108-94-1)
Listed on the Canadian DSL (Domestic Substances List)

Acetone (67-64-1)
Listed on the Canadian DSL (Domestic Substances List)

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 10/31/2022

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

GHS Full Text Phrases:

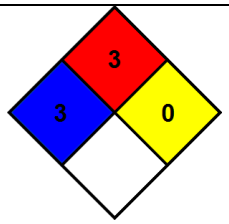
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled

H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H351	Suspected of causing cancer
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

NFPA Health Hazard : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

NFPA Fire Hazard : 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.

NFPA Reactivity Hazard : 0 - Material that in themselves are normally stable, even under fire conditions.



HMIS III Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

* Chronic - Chronic (long-term) health effects may result from repeated overexposure

Flammability : 3 Serious Hazard

Physical : 0 Minimal Hazard

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

NA GHS SDS 2015 (Can, US)