

Can cause central nervous system depression. Signs and symptoms may include headache, dizziness, nausea, vomiting, unconsciousness and even asphyxiation.

Propane 74-98-6

This material is a simple asphyxiant. Signs and symptoms of overexposure include cyanosis, respiratory distress, headache, dizziness, drowsiness, unconsciousness and asphyxiation. Can cause central nervous system depression.

Toluene 108-88-3

Can cause central nervous system depression. Signs and symptoms may include headache, dizziness, nausea, vomiting, unconsciousness and asphyxiation. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may lead to addiction and may be harmful or fatal.

Hexane 110-54-3

Can cause central nervous system depression. Signs and symptoms may include headache, dizziness, nausea, vomiting, unconsciousness and even asphyxiation.

Cyclohexane 110-82-7

Can cause central nervous system depression. Signs and symptoms may include headache, dizziness, nausea, vomiting, unconsciousness and even asphyxiation.

Dimethyl Ether 115-10-6

Can cause central nervous system depression. Signs and symptoms may include headache, dizziness, nausea, vomiting, unconsciousness and even asphyxiation.

- **Delayed Hazards**

Formaldehyde 50-00-0

POTENTIAL CANCER HAZARD.

Rats chronically exposed to 14 ppm formaldehyde contracted nasal cancers. Based on animal data and limited epidemiological evidence, NTP and IARC have listed formaldehyde as a probable human carcinogen. OSHA regulates formaldehyde as a potential human carcinogen. May cause allergic skin reaction. Some reports suggest that formaldehyde may cause respiratory sensitization, such as asthma, and that pre-existing respiratory and skin disorders may be aggravated by exposure.

OSHA has identified 0.5 ppm as the "Action Level", 29CFR 1910.1048. Please refer to the OSHA Standard for guidance applicable to your specific operations.

Acetone 67-64-1

Ingestion may cause liver damage.

Ingestion may cause kidney damage.

-- See Footnote C.

Toluene 108-88-3

Suspect reproductive hazard. May cause reproductive disorders based on animal data.

May cause spleen damage based on animal data.

Can cause liver damage.

Can cause kidney damage.

May cause cardiac sensitization based on animal data.
Prolonged and repeated exposures to high concentrations have resulted in hearing loss in laboratory animals.

-- See Footnote C.

Hexane 110-54-3

Suspect reproductive hazard. May cause male reproductive disorders based on animal data.

Chronic exposures may cause peripheral neuropathy.

-- See Footnote C.

Cyclohexane 110-82-7

May cause lung damage based on animal data. Pre-existing respiratory disorders may be aggravated by exposure.

May cause liver damage based on animal data.

May cause kidney damage based on animal data.

-- See Footnote C.

Footnote C: As of the date of issuance of this document, this material has not been listed by NTP, classified by IARC nor regulated by OSHA as a carcinogen.

4. First Aid Measures

INGESTION: If accidentally swallowed, dilute by drinking large quantities of water. Immediately contact poison control center or hospital emergency room for any other additional treatment directions.

INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Call a physician.

SKIN: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing and shoes before reuse.

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held apart during irrigation to insure water contact with entire surface of eyes and lids. Call a physician.

5. Fire Fighting Measures

Autoignition Temperature	Not determined
Upper/Lower Flammable Limits	Not determined
Up/Lower Explosive Limits, % by Vol	18/1 %
Flash Point	-104.5°C (-156°F) pensky-martens

c.c.

EXTREMELY FLAMMABLE LIQUID AND VAPOR.

Keep liquid and vapor away from heat, sparks, flame and other ignition sources including, but not limited to, pilot lights, heaters, cigarettes, electric motors and static discharge. Vapor is heavier than air and may settle in low places or travel outward to a source of ignition and flashback.

In case of fire, use water fog, dry chemical, foam or CO₂. Use water to keep fire-exposed containers cool.

6. Accidental Release Measures

Eliminate all ignition sources. Soak up with absorbent material and remove to a chemical disposal area. Prevent entry into natural bodies of water.

7. Handling and Storage

7.1 Handling

Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of the material from eyes, skin and clothing.

Wash thoroughly after handling. Always use appropriate Personal Protective Equipment (PPE).

INHALATION: Avoid breathing vapor. Use with adequate ventilation.

SKIN: Avoid contact with skin and clothing.

EYES: Avoid contact with eyes.

7.2 Storage

Store in a cool, well-ventilated area.

Store in cool, dry area away from sun, heat, oxidizing materials and alkaline materials.

Do not store at temperatures above 50 C.

Keep away from heat, sparks, flame and other ignition sources.

8. Exposure Controls/Personal Protection

8.1 Exposure Controls

ENGINEERING CONTROLS: The following exposure control techniques may be used to effectively minimize employee exposure: local exhaust ventilation, enclosed system design, process isolation and remote control in combination with appropriate use of personal protective

equipment and prudent work practices. These techniques may not necessarily address all issues pertaining to your operations. We, therefore, recommend that you consult with experts of your choice to determine whether or not your programs are adequate.

If airborne contaminants are generated when the material is heated or handled, sufficient ventilation in volume and air flow patterns should be provided to keep air contaminant concentration levels below acceptable criteria.

8.2 Personal Protection

Where air contaminants can exceed acceptable criteria, use NIOSH/MSHA approved respiratory protection equipment. Respirators should be selected based on the form and concentration of contaminants in air in accordance with OSHA laws and regulations or other applicable standards or guidelines, including ANSI standards regarding respiratory protection. Use goggles if contact is likely. Wear impervious gloves as required to prevent skin contact.

8.3 Exposure Guidelines

Formaldehyde 50-00-0
ACGIH TLV: 0.3 ppm (0.37 mg/m³) Ceiling, A2 - See Appendix A
OSHA PEL: 0.75 ppm(0.9 mg/m³) TWA; 2 ppm(2.5mg/m³)15min STEL

Acetone 67-64-1
ACGIH TLV: 500 ppm (1188 mg/m³) TWA; 750 ppm (1782 mg/m³) STEL
OSHA PEL: 1000 ppm (2400 mg/m³)TWA
REMANDED PEL: 750 ppm (1800 mg/m³) TWA; 1000 ppm (2400 mg/m³) STEL
OSHA 1989 PEL remanded, but in effect in some states

Propane 74-98-6
ACGIH TLV: 2500 ppm (4508 mg/m³) TWA
OSHA PEL: 1000 ppm (1800 mg/m³) TWA

Toluene 108-88-3
ACGIH TLV: Skin - 50 ppm (188 mg/m³) TWA
OSHA PEL: 200 ppm TWA; 300 ppm Ceiling; 500 ppm 10-min STEL
REMANDED PEL: 100 ppm (375 mg/m³) TWA; 150 ppm (560 mg/m³) STEL
OSHA 1989 PEL remanded, but in effect in some states

Hexane 110-54-3
ACGIH TLV: Skin - 50 ppm (176 mg/m³) TWA
OSHA PEL: 500 ppm (1800 mg/m³) TWA
REMANDED PEL: 50 ppm (180 mg/m³) TWA
OSHA 1989 PEL remanded, but in effect in some states

Cyclohexane 110-82-7
ACGIH TLV: 300 ppm (1030 mg/m³) TWA
OSHA PEL: 300 ppm (1050 mg/m³) TWA

Dimethyl Ether 115-10-6
ACGIH TLV: NONE ESTABLISHED
OSHA PEL: NONE ESTABLISHED

9. Physical and Chemical Properties

Percent Volatiles	79
VOC Content	62.2 %
pH @ 25 C	Not applicable
Specific Gravity	0.6928
Appearance	Clear amber liquid
Autoignition Temperature	Not determined
Boiling Point	-42.2 to 110.6°C (-44 to 231°F)
Vapor Density (Air=1)	>1
Vapor Pressure, mm Hg @ 20 C	Not determined
Evaporation Rate (Butyl Acetate=1)	>1
Upper/Lower Flammable Limits	Not determined
Up/Lower Explosive Limits, % by Vol	18/1 %
Flash Point	-104.5°C (-156°F) pensky-martens
C.C.	
Freezing Point	Not applicable
Melting point	Not applicable
Odor	Mint when wet
Odor Threshold, ppm	Not determined
Solubility in Water	Negligible
Coefficient of Water/Oil Distrib.	Not determined

10. Stability and Reactivity

Normally stable as defined in NFPA 704-12(4-3.1).

- **Conditions to Avoid:**

Keep away from combustibles, ignition sources, oxidizers and acids.

- **Incompatibilities:**

Strong oxidizers and reducing agents.

- **Decomposition products may include:**

CO, CO₂, aldehydes and carboxylic acids.

- **Hazardous polymerization:**

Will not occur.

- **Other Hazards:**

None known to company.

11. Toxicological Information

See Section 3 Hazards Identification information.

Formaldehyde 50-00-0

LC50: rat=203 mg/m³ (RTECS)

LD50: orl-rat=0.8 g/kg (Merck); skn-rbt=0.27 g/kg (Sax)

Acetone 67-64-1

LC50: Not available

LD50: oral-rat=5800 mg/kg (RTECS); skin-rabbit=20 g/kg (RTECS)

Propane 74-98-6

LC50: Not available

LD50: Not available

Toluene 108-88-3

LC50: Not available

LD50: orl-rat=5000 mg/kg; skn-rbt=14 g/kg (Sax)

Hexane 110-54-3

LC50: Not available

LD50: orl-rat=28700 ug/kg (Sax)

Cyclohexane 110-82-7

LC50: Not available

LD50: orl-rat=29.82 g/kg (Sax)

Dimethyl Ether 115-10-6

LC50: Not available

LD50: Not available

12. Ecological Information

Not determined.

13. Disposal Considerations

Recover free liquid. Absorb residue and dispose of according to local, state/provincial, and federal requirements.

Empty container: May contain explosive vapors. DO NOT cut, puncture or weld on or nearby.

14. Transport Information

14.1 U.S. Department of Transportation (DOT)

The data provided in this section is for information only and may not be specific to your package size. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

ORM-D Consumer Commodity.

14.2 Canadian Transportation of Dangerous Goods (TDG)

Not determined.

15. Regulatory Information (Selected Regulations)

15.1 U.S. Federal Regulations

- **OSHA Hazard Communication Standard 29CFR1910.1200**

This material is a "health hazard" and/or a "physical hazard" as determined when reviewed according to the requirements of the Occupational Safety and Health Administration 29 CFR Part 1910.1200 "Hazard Communication" Standard.

- **SARA Title III: Section 311/312**

Fire hazard
Immediate health hazard
Delayed health hazard

- **SARA Title III Section 313 and 40 CFR Part 372**

This product contains the following toxic chemical(s) subject to the

reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.

Toluene	108-88-3
10.00%	
n-Hexane	110-54-3
25.00%	
Cyclohexane	110-82-7
5.00%	

- **TSCA Section 8(b) Inventory**

All reportable chemical substances are listed on the TSCA Inventory. We rely on certifications of compliance from our suppliers for chemical substances not manufactured by us.

15.2 Canadian Regulations

- **Workplace Hazardous Materials Information System (WHMIS)**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR) and the MSDS contains all the information required by the CPR.

CLASS D, DIV 1B

CLASS D, DIV 2B

CLASS B, DIV 2

- **Canadian Environmental Protection Act (CEPA)**

All reportable chemical substances are listed on the Domestic Substances List (DSL) or otherwise comply with CEPA new substance notification requirements.

- **National Pollutant Release Inventory (NPRI)**

This product contains the following chemical(s) subject to the reporting requirements of the Canadian Environmental Protection Act (CEPA) subsection 16(1), National Pollutant Release Inventory.

Toluene	108-88-3
10.00%	

Hexane	110-54-3
25.00%	
Cyclohexane	110-82-7
5.00%	

16. Other Information

CL (Cautionary Labeling): Products bearing the CL (Cautionary Labeling) Seal of The Art & Creative Materials Institute, Inc. (ACMI) are certified to be properly labeled in a program of toxicological evaluation by a medical expert. This program is reviewed by ACMI's Toxicological Advisory Board. These products are certified by ACMI to be labeled in accordance with the chronic hazard labeling standard, ASTM D-4236 and Federal Law, P.L. 100-695.

- **User's Responsibility**

The OSHA Hazard Communication Standard 29CFR 1910.1200 and the Workplace Hazardous Materials Information System (WHMIS) require that the information contained on these sheets be made available to your workers. Educate and train your workers regarding OSHA and WHMIS precautions. Instruct your workers to handle this product properly. Consult with appropriate experts to guard against hazards associated with use of this product and its ingredients.

- **Disclaimer**

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE, except that the product shall conform to contracted specifications, and that the product does not infringe any valid United States or Canadian patent. No claim of any kind shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.
