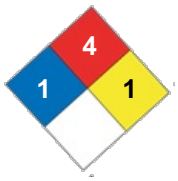
## Lenox

Propylene

NFPA




HMIS

| | |
|---|---|
| HEALTH | 1 |
| FIRE | 4 |
| REACTIVITY | 1 |
| PPE | |

## SECTION 1 : Chemical Product and Company Identification

MSDS Name: Propylene
Manufacturer Name:Lenox
Address:
301 Chestnut Street
East Longmeadow, MA

Business Phone:800-628-8810
Product Description:
Propylene

For information in North America, call: 800-628-8810
For emergencies in the US, call CHEMTREC: 800-424-9300
Manufacturer MSDS Revision Date:
8/2008
Supersedes: 4/15/2008
Last Revised: Original

NFPA
Health: 1
Flammability: 4
Reactivity: 1
Other:
HMIS
Health Hazard: 1
Fire Hazard: 4
Reactivity: 1
Personal Protection:

TOP

## SECTION 2 : Hazardous Ingredients/Identity Information

| Chemical Name | CAS# | % Weight | |
|---|---|---|---|
| Propylene | 115-07-1 | 99.5 - 100% | |

OSHA PEL TWA: Not Established
ACGIH TLV TWA: 500 ppm

| Chemical Name | CAS# | % Weight | |
|---|---|---|---|
| Propane | 74-98-6 | 0 - 0.5% | |

OSHA PEL TWA: 1000 ppm
ACGIH TLV TWA: 1000 ppm

TOP

## SECTION 3 : Physical And Chemical Characteristics

Physical State/Appearance:
Gas

Color:
Colorless

Odor:
Hydrocarbon

Vapor Pressure:
109.73 psig @ 70 deg F

Vapor Density:
(Air = 1): 1.5 @ 32 deg F

Boiling Point:
-54 deg F

Melting Point:
-301 deg F

Solubility:
In Water: Slight

Specific Gravity:
0.52 (liquid)

Percent Volatile:
By Weight: 100

Molecular Weight:
42

FlashPoint:
-162 deg F

Auto Ignition Temp:
927 deg F

Upper Flammable Explosive Limit:
11.0% by volume in air

Lower Flammable Explosive Limit:
2.0% by volume in air

TOP

## SECTION 4 : Fire And Explosion Hazards

Flash Point:
-162 deg F

Upper Flammable or Explosive Limit: 11.0% by volume in air

Lower Flammable or Explosive Limit: 2.0% by volume in air

Auto Ignition Temperature: 927 deg F

Extinguishing Media:
Dry chemical, foam, carbon dioxide, Halon or water.

Hazardous Combustion Byproducts:
Carbon monoxide, carbon dioxide and various non-combusted hydrocarbons.

Unusual Fire Hazards:
Use extreme caution when fighting liquefied petroleum gas fires. Heated containers may rupture violently and suddenly without warning due to vessel overpressure (BLEVE - boiling liquid expanding vapor explosions). If safe to do so, stop the flow of gas and allow the flame to burn out. Extinguishing the flame before shutting off the supply can cause formation of explosive mixtures. In some cases it may be preferred to allow the flame to continue to burn. Use water to cool equipment, surfaces and containers exposed to fire and excessive heat.

General Fire Hazards: Liquid releases vapors hat readily form a flammable mixture with air. Dangerous fire and explosion hazard when exposed to heat, sparks or flame. Vapors are heavier than air and may travel long distances to a point of ignition. Container may explode in heat or flame.

TOP

## SECTION 5 : Health Hazards

**Applies to All Ingredients:**

Route of Exposure:
Inhalation

Potential Health Effects:

Eye Contact:
Vapor is generally non-irritating to the skin. Contact with liquefied gas or rapidly expanding gases may cause freeze burns and frontbite.

Skin Contact:
Vapor is generally non-irritating to the skin. Contact with liquefied gas or rapidly expaniding gases may cause freeze burns and frontbite.

Inhalation:

Product is an anesthetic at high concentrations. Inhalation may cause central nervous system depression producing dizziness, drowsiness, headache and similar narcotic symptoms. Extremely high concentrations can cause asphyxiation and death by displacing oxygen from the breathing atmosphere.

Ingestion:

Ingestion is not likely.

Carcinogenicity:

Propylene is not identified as being carcinogenic by the International Agency for Research on Cancer (IARC), The National Toxicology Program (NTP), ACGIH or OSHA.

Target Organs:

Respiratory system

Aggravation of Pre-Existing Conditions:

Chronic diseases or disorders of the respiratory system.

Toxicological Paragraph:

Propylene is an anesthetic and is mildly irritating to the mucous membranes. At high concentrations propylene acts as a simple asphixiant without significant potential for systematic toxicity. High concentrations can cause death due to oxygen depletion. Toxicity data can be found in the Registry of Toxic Effects of Chemical Substances available on-line from the National Institute for Occupational Safety and Health (NIOSH).

TOP

## SECTION 6 : Emergency And First Aid Procedures

Emergency Overview:

This product contains propylene. A colorless liquid that repidly turns into a gas at standard atmospheric temperatures and pressure. Propylene has a slight hydrocarbon odor. In commerce propylene is packaged as a liquified and gas under pressure. Propylene is extremely flammable and explosive. At high concentrations it acts as a simple asphixiant by diluting and displacing oxygen, particularly in confined spaces. Direct contact with liquefied product may cause freeze burns and frontbite. Use this product only in well ventilated areas and, where appropriate, proper respiratory protection and personal protective equipment should be worn.

Eye Contact:

Flush eyes with plenty of water for at least 15 minutes while occasionally lifting the eyelids. Seek medical attention.

Skin Contact:

Remove contaminated clothing. Wash with soap and water. Get midical attention if irritation or redness develops. In case of frostbite, place affected area in warm water or wrap in blankets if warm water is not available. DO NOT USE HOT WATER. Seek immediate medical attention.

Inhalation:

Remove to fresh air. Administer oxygen or artificial respiration if necessary. Seek immediate medical attention.

Ingestion:

Risk of ingestion is extremely low. Seek immediate medical attention in cases of ingestion or oral exposure.

TOP

## SECTION 7 : Reactivity Data

Chemical Stability:

Stable

Conditions to Avoid:

Sources of heat, sparks or flame.

Incompatibilities with Other Materials:

Strong oxidizers such as nitrates, perchlorates, chlorine and fluorine.

Hazardous Polymerization:

Does not polymerize except under special conditions (extreme temperature, pressure, oxidizers).

Hazardous Decomposition Products:

Carbon oxides and various hydrocarbons formed when burned.

TOP

## SECTION 8 : Precautions For Safe Handling

Spill Cleanup Measures:

Evacuate area of all unnecessary personnel. Remove or shut off all sources of ignition. Ventilate the area thoroughly.

Handling:

Keep away from flame, sparks and excessive temperatures. Use only in well-ventilated areas.

Storage:

Store in a cool, dry, well-ventilated area away from sources of ignition, strong oxidizers or other incompatible materials. Post "No Smoking or Open Flame" signs in the storage and use areas. Protect cylinders against physical damage. Do not cut, drill, grind or weld on empty cylinders since they may contain explosive residues. Do not attempt to refill cylinders.

Waste Disposal:

Waste disposal must be in accordance with appropriate Federal, State and local regulations.

DOT:

Product is classified as a Hazardous Substance under 49 CFR 172.101.
Marking: Propylene, UN1077
Placard: Flammable Gas/UN1077
Hazardous Substance/RQ: Not Applicable
Shipping Description: Propylene, 2.1 (Flammable Gas), UN1077
Packaging References: 49 CFR 173.304, 173.306, 173.314 and 173.315

DOT Shipping Name:

Propylene

DOT Hazard Class: 2.1 (Flammable Gas)

DOT Identification Number: UN1077

DOT Packing Group: Not applicable

DOT Subpart E Labeling Requirement: Flammable Gas

TOP

## SECTION 9 : Control Measures

Engineering Controls:

Good industrial hygiene practice requires that engineering controls be used where feasible to reduce workplace concentrations of hazardous materials.

Ventilation System:

Use adequate ventilation to keep gas and vapor concentrations of this product below the occupational exposure and flammability limits, particularly in confines spaces. Use mechanical ventilation that is explosion proof.

Eye/Face Protection:

Use safety glasses or goggles as required for welding or burning. Use splash-proof goggles or faceshield where there is the possibility of liquid contact.

Protective Clothing/Body Protection:

Protective clothing should be worn to prevent skin contact. Protective gloves should be worn as required for welding or burning. Use insulated gloves where there is the possibility of liquid contact.

Respiratory Protection:

Maintain oxygen levels above 19.5% in the workplace. Respirators must be worn if ambient concentrations of contaminants exceed prescribed exposure limits. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134). Select respirator based on its suitability to provide adequate worker protection for given work conditions, level of airborne contamination, and presence of sufficient oxygen. When required, only NIOSH approved respirators should be used.

TOP

## SECTION 10 : Other Information

**Applies to all ingredients:**

TSCA 8(b): Inventory Status

Propylene is listed on the TSCA Inventory.

Section 302:

Extremely Hazardous Substances (40 CFR Part 355): This product is not regulated under 40 CFR Part 355.

Section 304:

CERCLA Reportable Quantities (40 CFR Part 302.4): This product is not reportable under 40 CFR Part 302.4.

Section 312 Hazard Category:

SARA 311/312 Hazard Class (40CFR Part 370): The following hazard categories apply to this product:

Acute: Yes

Fire: Yes

Pressure: Yes

Section 313 Toxic Release Form:

SARA 313 (40 CFR Part 372): Propylene is subject to the Toxic Release Reporting requirements of 40 CFR Part 372.

OSHA 29 CFR 1200:

OSHA Hazardous Communication (29 CFR Part 1910.1200): This product is hazardous as defined in OSHA's Hazard Communication standard.
OSHA Process Safety Management (29 CFR Part 1910.119): This product may be subject to OSHA's Process Safety Management of Highly Hazardous Chemicals standard.

State:

California Proposition 65: Propylene is not on the California Proposition 65 lists.

The following States are known to have specific regulations applicable to ingredients in this produc:
Massachusetts
New Jersey
Rhode Island
Minnesota
Pennsylvania

Canada WHMIS:

WHIMS: A, B1

Chemical Accident Prevention Provisions (40 CFR Part 68): Propylene is subject to the reporting requirements of 40 CFR Part 68.

HMIS:

Health Hazard: 1

Fire Hazard: 4

Reactivity: 1

NFPA:

Fire Hazard: 4

Health: 1

Reactivity: 1

MSDS Revision Date:

8/2008
Supersedes: 4/15/2008
Last Revised: Original

Disclaimer:

All information in this Material Safety Data Sheet is believed to be accurate and reliable. However, no guarantee or warranty of any kind is made with regard to the accuracy of information or the suitability of the recommendations contained herein. It is the user's responsibility to assess the safety and toxicity of this product under their own conditions of use and to comply with all applicable laws and regulations.

Comment:

The HMIS ratings displayed on this MSDS are from the HMIS Third Edition. There have been significant changes made to the system. "PH" stands for "Physical Hazard" as defined in the OSHA Hazardous Communication Standard and replaces the former code "R" for "Reactivity".

HMIS®

WHIMS: A, B1