



Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. This Standard must be consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label and List) PROPYLENE	Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.
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Section I

Manufacturer's Name BernzOmatic	Emergency Telephone Number 800-424-9300
Address (Number, Street, City, State, and ZIP Code) 1 Bernzomatic Drive	Telephone Number for Information 800-654-9011
Medina, NY 14103	Date Prepared June 11, 2011
	Signature of Preparer (optional)

Section II - Hazard Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	US OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Propylene (CAS No. 115-07-1)	Not Established	500 ppm		99.5-100%
Propane (CAS No. 74-98-6)	1000ppm	1000ppm		0-0.5%
NFPA HAZARD RATINGS Health - 1 Flammability - 4 Reactivity - 1			HMIS RATINGS Health - 1 Flammability - 4 Reactivity - 1	

Notes:

Section III - Physical/Chemical Characteristics

Boiling Point:	-54° F	Specific Gravity (H ₂ O = 1):	0.52 (liquid)
Vapor Pressure (mm Hg.):	109.73 psig @ 70° F	Melting Point:	-301° F
Vapor Density (AIR = 1):	1.5 @ 32° F	Evaporation Rate (Butyl Acetate = 1):	
Molecular Weight:	42	Percent Volatile by Weight:	100%
Solubility in Water: Slight.			
Appearance and Odor (At Normal Conditions): Appearance: Colorless gas. Odor: Hydrocarbon.			



Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used): -162° F	Flammable Limits:	LEL	UEL
General Fire Hazards:			
Liquid releases vapors that 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.			
Hazardous Combustion Products:			
Carbon monoxide, carbon dioxide and various non-combusted hydrocarbons.			
Extinguishing Media:			
Dry chemical, foam, carbon dioxide, Halon or water.			
Special Fire Fighting Procedures:			
Unusual Fire and Explosion 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.			

Section V - Reactivity Data

Stability:	Unstable		Conditions to Avoid:
	Stable	X	
Incompatibility (<i>Materials to Avoid</i>): Strong oxidizers such as nitrates, perchlorates, chlorine and fluorine.			
Hazardous Decomposition or Byproducts: Carbon oxides and various hydrocarbons formed when burned.			
Hazardous Polymerization:	May Occur		Conditions to Avoid:
	Will Not Occur	X (Except under special conditions such as extreme temperature, pressure and oxidizers).	Sources of heat, sparks or flame.



Section VI - Health Hazard Data

<p>Overview: This product contains propylene. A colorless liquid that rapidly turns into a gas at standard atmospheric temperatures and pressure. Propylene has a slight hydrocarbon odor. In commerce propylene is packaged as a liquefied and gas under pressure. Propylene is extremely flammable and explosive. At high concentrations it acts as a simple asphyxiant 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.</p>				
Route(s) of Entry:		Inhalation? YES	Skin?	Ingestion?
<p>Health Hazards (<i>Acute and Chronic</i>) Target Organs: Respiratory system.</p>				
Carcinogenicity:	NTP? Not listed as a carcinogen	IARC? Not listed as a carcinogen	ACGIH? Not listed as a carcinogen	OSHA Regulated? Not listed as a carcinogen
<p>Signs and Symptoms of Exposure:</p> <p><u>Inhalation:</u> 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.</p> <p><u>Eyes:</u> Vapor is generally non-irritating to the eyes. Contact with liquefied gas or rapidly expanding gases may cause freeze burns and frontbite.</p> <p><u>Skin:</u> Vapor is generally non-irritating to the skin. Contact with liquefied gas or rapidly expanding gases may cause freeze burns and frontbite.</p> <p><u>Ingestion:</u> Ingestion is not likely.</p>				
<p>Medical Conditions Generally Aggravated by Exposure:</p> <p>Chronic diseases or disorders of the respiratory system.</p>				
<p>Toxicological Information:</p> <p>Propylene is an anesthetic and is mildly irritating to the mucous membranes. At high concentrations propylene acts as a simple asphyxiant 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).</p>				
<p>Emergency and First Aid Procedures:</p> <p><u>Eye Contact:</u> Flush eyes with plenty of water for at least 15 minutes while occasionally lifting the eyelids. Seek medical attention.</p> <p><u>Skin Contact:</u> Remove contaminated clothing. Wash with soap and water. Get medical 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.</p> <p><u>Ingestion:</u> Risk of ingestion is extremely low. Seek immediate medical attention in cases of ingestion or oral exposure.</p>				
<p>Warning:</p> <p>This fuel and by-products of combustion of this fuel, contain chemicals known to the State of California to cause cancer, birth defects, and other reproductive harm.</p>				



Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled:	
Evacuate area of all unnecessary personnel. Remove or shut off all sources of ignition. Ventilate the area thoroughly.	
Waste Disposal Method:	
Must be in accordance with appropriate Federal, State and local regulations.	
Precautions to Be taken in Handling and Storing:	
<p>Handling: Keep away from flame, sparks and excessive temperatures. Use only in well-ventilated areas.</p> <p>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.</p>	
Other Precautions:	

Section VIII - Control Measures

Respiratory Protection (<i>Specify Type</i>):	
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 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.	
Ventilation:	
Use adequate ventilation to keep gas and vapor concentration of this product below the occupational exposure and flammability limits, particularly in confined spaces. Use mechanical ventilation that is explosion proof.	
Local Exhaust – Mechanical (General) – Special – Other –	
Protective Gloves:	Eye Protection:
Should be worn as required for welding or burning. Use insulated gloves where there is a possibility of liquid contact.	Use safety glasses or goggles as required for welding or burning. Use splash-proof goggles or faceshield where there is a possibility of liquid contact.
Other Protective Clothing or Equipment:	
Protective clothing should be worn to prevent skin contact.	
Work/Hygienic Practices:	
Engineering Controls:	
Good industrial hygiene practice requires that engineering controls be used where feasible to reduce workplace concentrations of hazardous materials.	

Section IX - Special Precautions



Precautions to be taken in Handling and Storing: None
Other Precautions: None

Section X – Transportation Information

WHMIS Classification:	
Class:	2.1 (Flammable Gas)
Proper Shipping Name:	Propylene
Shipping Description:	Propylene, 2.1 (Petroleum gases, liquefied/UN1077)
Packing Group:	N/A
Hazard Classification:	Product is classified as a Hazardous Substance under 29 CFR 172.101
UN Number:	1077
Marking:	Propylene, UN1077
Label:	Flammable Gas
Placard:	Petroleum gasses, liquefied / UN1077
Hazardous Substance/RQ:	N/A
Packaging References:	49 CFR 173.304, 173.306, 173.314 and 173.315

Section XI – Regulatory Data

US Federal Regulations:	<ul style="list-style-type: none"> • OSHA Hazardous Communication (29 CFR Part 1910.1200): This product is hazardous as defined in OSHA's Hazard Communication standard • OSHA Product Safety Management (29 CFR Part 1910.119): This product may be subject to OSHA's Process Safety Management of Highly Hazardous Chemicals standard. • CERCLA Reportable Quantities (40 CFR Part 203.4): This product is not reportable under 40 CFR Part 302.4. • Extremely Hazardous Substances (40 CFR Part 355): This product is not regulated under 40 CFR Part 355. • SARA 311/312 Hazard Class (40CFR Part 370): The following hazard categories apply to this product: <ul style="list-style-type: none"> ○ Acute Health Hazard ○ Fire Hazard ○ Sudden Release of Pressure • SARA 313 (40 CFR Part 372): Propylene is subject to the Toxic Release Reporting requirements of 40 CFR Part 372. • TSCA Inventory Status: Propylene is listed on the TSCA Inventory. • Chemical Accident Prevention Provisions (40 CFR Part 68): Propylene is subject
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to the reporting requirements of 40 CFR Part 68.

State Regulations:

- 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 the product:
 - Massachusetts
 - Minnesota
 - New Jersey
 - Pennsylvania
 - Rhode Island

Section XII – Additional Information

DISCLAIMER: All information in the 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.

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