SAFETY DATA SHEET

Effective Date: 29 January 2025	Revision: B.2	ARC	Language: EN

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER	
1.1. GHS product identifier.	Propylene Oxide
Other means of identification.	Epoxypropane
1.2. Recommended use and restrictions on use.	Recommended: Used primarily as an intermediate in the synthesis of other chemicals and polymers; as a fumigant for specific dried fruits, nuts, herbs, spices, and cocoa; as a mixture with CO_2; as a stabilizer for methylene chloride; acid scavenger; pH control agent; as a treatment chemical for removing residual from crude polyolefins. Advised Against: Consumer use.
1.3. Supplier's details.	Name: ARC Specialty Products c/o Balchem Corporation Address: 5 Paragon Drive Suite 201 Montvale, NJ 07645 USA Phone number: +1 845-326-5611 Fax number: +1 845-326-5706 (Cust Serv) Internet: www.balchem.com Email: sds@balchem.com
1.4. Emergency phone number.	EMERGENCY TELEPHONE (24 hrs. / 7 days per week) In US: CHEMTREC (800) 424-9300 Outside US & Canada: CHEMTREC (703) 527-3887 CHEMTREC CCN #1625
2. HAZARDS IDENTIFICATION	
2.1. GHS classification of the substance or mixture and any national or regional information.	Flammable Liquid 1 Carcinogen Category 1B Mutagen Category 1B Acute Toxicity Category 4 (Inhalation); Category 4(oral); Category 4 (dermal) Eye Irritant Category 2A Specific Target Organ Toxicity – Single Exposure 3 Skin Irritant 2
2.2. GHS label elements, including precautionary statements.	Product Label Name: PROPYLENE OXIDE Signal Word: DANGER  **Hazard statement:** H224: Extremely flammable liquid and vapour. H302: Harmful if swallowed H312: Harmful in contact with skin H315: Causes skin irritation H319: Causes serious eye irritation H332: Harmful if inhaled H335: May cause respiratory irritation H340: May cause genetic defects

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	H350:	May cause cancer
	Precautionary statement:	
	P201:	Obtain special instructions before use.
	P202:	Do not handle until all safety precautions have been read and understood.
	P210:	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
	P233:	Keep container tightly closed.
	P240:	Ground/bond container and receiving equipment.
	P241:	Use explosion-proof electrical/ventilating/lighting/ equipment.
	P242:	Use only non-sparking tools.
	P243:	Take precautionary measures against static discharge.
	P261:	Avoid breathing gas/vapours.
	P264:	Wash hands thoroughly after handling.
	P270:	Do not eat, drink or smoke when using this product.
	P271:	Use only outdoors or in a well-ventilated area.
	P280:	Wear protective gloves/protective clothing/ eye protection/face protection.
	P281:	Use personal protective equipment as required.
	P301+P312:	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
	P330:	Rinse mouth.
	P302+P352:	IF ON SKIN: Wash with plenty of soap and water.
	P303+P361+ P353:	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P362+P363:	Take off contaminated clothing and wash before reuse.
	P332+P313:	If skin irritation occurs: Get medical advice/attention.
	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.
	P337+P313:	If eye irritation persists: Get

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	medical advice/attention. P312: Call a POISON CENTER or doctor/physician if you feel unwell. P308+P313: IF exposed or concerned: Get medical advice/attention. P321+P322: Specific treatment: See first aid section of SDS. P370+P378: In case of fire, use carbon dioxide, dry chemical, alcohol resistant foam or water spray for extinction. 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/ international regulation.
2.3. Other hazards which do not result in classification or are not covered by the GHS.	None.

3. COMPOSITION/INFORMATION ON INGREDIENTS			
3.1. **Substance:**			
Chemical identity.	Propylene Oxide		
Common name, synonyms, etc.	PO; PPO; 1,2-Epoxypropane; Propene Oxide, Methyl Ethylene Oxide, Methyloxirane, Propylene Epoxide, Epoxypropane		
CAS number, EC number, etc.	CAS#: 75-56-9; EC#: 200-879-2 (from EINECS) Formula: C_3H_6O Molecular Weight: 58.08 g/mol		
Impurities and stabilizing additives which are themselves classified and which contribute to the classification of the substance.	Contains no other components or impurities which will influence the classification of the product.		
3.2. **Mixture:**			
The chemical identity and concentration or concentration ranges of all ingredients which are hazardous within the meaning of the GHS and are present above their cutoff levels.	**Chemical Identity:**	**Concentration:**	**CAS No.:**
	No applicable information found (i.e., material is not a mixture).		

4. FIRST AID MEASURES	
4.1. Description of first aid measures.	EYE CONTACT: Immediately flush eyes, including the entire surface of the eyes and under the eyelids, gently but thoroughly with plenty of running water for at least 15 minutes. Obtain medical attention immediately. **NOTE: Never wear contact lenses when working with propylene oxide.** SKIN CONTACT: Immediately flush skin thoroughly with water for at least 15 minutes while removing contaminated clothing and shoes. Obtain medical attention immediately. Wash clothing before reuse and discard contaminated leather articles such as shoes and belts. INHALATION: Remove exposed person to fresh air. If breathing has stopped, give artificial respiration then

	have qualified personnel administer oxygen, if needed. Get immediate medical attention. INGESTION: If patient is conscious give plenty of water (minimum of two glasses) but **DO NOT INDUCE VOMITING**. This material is corrosive. Keep head lower than hips to avoid aspiration, should vomiting occur. Get medical attention immediately. MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Persons with pre-existing skin, kidney, liver and respiratory disorders may be at increased risk from exposure to this substance.
4.2. Most important symptoms/effects.	SIGNS AND SYMPTOMS OF OVEREXPOSURE: Effects include severe eye, skin and respiratory irritation or burns, skin rash, blistering. Effects of central nervous system depression include excitement, headache, dizziness, loss of coordination, narcosis, drunkenness, nausea, vomiting, collapse, coma and respiratory arrest. Effects from swallowing may include severe irritation and burns to the gastrointestinal tract, nausea, vomiting, diarrhea, central nervous system depression and difficulty breathing.
4.3. Indication of immediate medical attention and special treatment needed, if necessary.	NOTE TO PHYSICIANS: Propylene oxide is an irritant that may cause coughing, dyspnea, noncardiogenic pulmonary edema, or chemical pneumonitis. Cyanosis has occurred. Lung injury has been observed in experimental animals. Respiratory effects may be delayed. Evaluate for respiratory distress. Consider oxygen administration. If a chemical burn is present, decontaminate skin and treat as any thermal burn. No specific antidote is known, however, consider gastric lavage and administration of a charcoal slurry.

5. FIREFIGHTING MEASURES	
5.1. Suitable (and unsuitable) extinguishing media.	EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, alcohol resistant foam or water spray for small fires. Water spray, water for or alcohol resistant foams for large fires. Liquid will float and may reignite on the surface of the water. Water spray can be used to reduce flame intensity, cool fire-exposed containers and dilute spills to render non-flammable.
5.2. Specific hazards arising from the chemical.	EMERGENCY OVERVIEW: Colorless liquid with a sweet, ether-like odor. Extremely flammable vapor. Vapors may cause flash fire and can form explosive mixtures with air. May polymerize explosively when involved in a fire or in contact with incompatible materials. Causes severe eye, skin and gastrointestinal irritation or burns and respiratory tract irritation with central nervous system effects. Harmful if swallowed or absorbed through the skin. Statement of Hazards: DANGER! Extremely flammable liquid and vapor. May form explosive mixtures with air. Causes severe eye and skin irritation with possible

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	burns. May cause allergic skin reaction. May be harmful if absorbed through the skin. Inhalation may cause respiratory irritation and central nervous system depression. Harmful if swallowed. May cause burns to the gastrointestinal tract and central nervous system depression. Aspiration may cause lung damage. Possible cancer hazard. May cause cancer based on animal data. Possible reproductive hazard. HAZARD RATINGS: (0 = minimum; 4 = maximum) HMIS Rating: Health = 3 Flammability = 4 Reactivity = 2 Personal Protection Code = X (Consult your supervisor or standard operating procedures for special handling directions.) NFPA Rating: Health = 3 Flammability = 4 Reactivity = 2 UNUSUAL FIRE AND EXPLOSION HAZARDS: Liquid propylene oxide is lighter than water (floats) and vapors are heavier than air and may travel along ground long distances to sources of ignition, and then flash back. Containers are fitted with metallic plugs which melt and release contents when temperature increases to a range of 157-170 ºF (69-77 ºC). Vapors are extremely flammable and are readily ignited by static charge, sparks and flames at concentrations above 1.7%.

5.3. Special protective equipment and precautions for firefighters.	SPECIAL FIRE-FIGHTING PROCEDURES: Wear NIOSH-approved self-contained breathing apparatus (SCBA) operated in the pressure-demand mode and full chemical-resistant protective clothing. Evacuate all personnel from danger area and keep upwind. Immediately cool containers with water spray from maximum safe distance. Remove containers from fire area, if without risk. Refer to the most current edition of the "North American Emergency Response Guidebook" for isolation and evacuation distances.

6. ACCIDENTAL RELEASE MEASURES	
6.1. Personal precautions, protective equipment and emergency procedures.	PRECAUTIONS: Treat any propylene oxide leak as an emergency. All cleanup personnel must wear full protective equipment. Evacuate all personnel from the area except those directly engaged in stopping the leak or in cleaning up.
6.2. Environmental precautions.	ENVIRONMENTAL: Dike runoff water, if possible, to prevent contaminated water from entering sewers, ditches, streams and ponds. It is mandatory to call the National Response Center (800-424-8802) if 100 pounds (45.4 kg) or more is spilled or released to the environment.

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6.3. Methods and materials for containment and cleaning up.	SPILL CLEANUP: Eliminate all ignition sources if this can be done safely. Propylene oxide/air mixtures ignite readily and may detonate. Use water fog or spray to disperse vapors. Blanket spill with water fog or alcohol foam to reduce vapors. Collect with an inert absorbent such as dry sand or earth and place into an appropriate container for disposal. Do not use clay-based absorbents or combustible materials. Do not flush to the sewer.

7. HANDLING AND STORAGE	
7.1. Precautions for safe handling.	HANDLING AND STORAGE PRECAUTIONS: Wear all recommended protective clothing and devices when handling this material. Have established handling and emergency response procedures in place prior to use. Ground and bond shipping container, transfer line, and receiving container. Use non-sparking tools and equipment, including explosion proof ventilation. Empty containers retain product residues and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose empty containers to heat, sparks or open flames. Protect containers from physical damage and regularly inspect them for cracks, leaks or faulty valves.
7.2. Conditions for safe storage, including any incompatibilities.	STORAGE SEGREGATION: Store propylene oxide in a cool, dry, well-ventilated area away from incompatible chemicals and sources of ignition. Store cylinders and drums upright; secure containers tightly; do not drag or slide; and move in a carefully supervised manner with a suitable hand truck. **DO NOT STORE IN DIRECT SUNLIGHT**. SHIPPING AND STORAGE CONTAINERS: (See 49 CFR 173.201 and 173.243) Propylene oxide is shipped and stored in a unique UN 1A1 specification drum, and DOT specification cylinders and portable tanks. Nitrogen is charged into the container after filling with propylene oxide, bringing the total container pressure up to 50 psig. Before returning container to supplier, pressurize container with nitrogen to 50 psig total pressure; close valves and replace valve plugs tightly in outlets. **Check container valves and plugs for leaks prior to shipment**. In addition, please refer to the most current edition of NFPA Publication NFPA 30, 'Flammable and Combustible Liquids Code.' INCOMPATIBILITIES: Avoid acids, bases, peroxides, oxidizing agents, clay-based absorbents, polymerization catalysts, epoxy resins, anhydrous metal chlorides.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters.

	Exposure Limits		
SOURCE	TWA (8-hr)	STEL (15-min)	OTHER
OSHA	100 ppm (240 mg/m^3)	No applicable information found	No applicable information found
ACGIH	2 ppm (4.8 mg/m^3)	No applicable information found	400 ppm IDLH

8.2. Appropriate engineering controls.

ENGINEERING CONTROLS: Propylene oxide is flammable. All electrical devices used in areas processing or handling propylene oxide must be engineered and designed to the applicable local electrical/fire codes. Safeguards can include designing electrical devices as explosion-proof and/or intrinsically safe. When considering engineering controls, users of propylene oxide should consult the current edition of NFPA 30 (Flammable and Combustible Liquids Code).

VENTILATION: Install and operate general and local exhaust ventilation systems powerful enough to maintain airborne levels of propylene oxide below the OSHA PEL in the worker's breathing area. Ventilation systems must be of maximum explosion-proof design. Emission controls must be in compliance with Federal, State and local regulations. See NFPA 30 (Flammable and Combustible Liquids Code).

SAFETY SHOWERS: Have eyewash stations, emergency deluge showers, and washing facilities available in all work areas.

OTHER PROTECTION: Design all engineering systems to be explosion-proof in any area where vapor may be present. Container and system must be electrically grounded/bonded before unloading. Practice good personal hygiene; always wash thoroughly after using this material. Do not eat, drink or smoke in work area.

8.3. Individual protection measures, such as personal protective equipment.

RESPIRATORY PROTECTION: Refer to OSHA respirator regulations cited at 29 CFR 1910.134. Wear a NIOSH-approved supplied air respirator with full facepiece or NIOSH-approved self-contained breathing apparatus (SCBA) operated in positive pressure mode. Air purifying respirators are ineffective and must not be used.

EYE PROTECTION: Always wear chemical safety glasses. If splashing may occur, wear a full face shield as a supplementary protective measure over safety glasses. **NEVER WEAR CONTACT LENSES** when working with propylene oxide.

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	SKIN PROTECTION: Wear impervious gloves; boots; aprons; head cover; and clean impervious body-covering clothing to prevent any possibility of skin contact. Launder contaminated clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES	
9.1. Information on basic physical and chemical properties.	
Appearance (physical state, color, etc.).	Colorless liquid
Corrosivity	Not Corrosive
Odor.	Sweet ether-like
Odor threshold.	200 ppm
pH.	7, neutral (100 g/L in water)
Melting point/freezing point.	-169 ºF (-111.9 ºC)
Initial boiling point and boiling range.	94 ºF (34.2 ºC)
Flash point.	Tag Closed Cup: -35 ºF (-37.2 ºC)
Evaporation rate.	100% volatile by volume
Flammability (solid, gas).	Flammable
Upper/lower flammability or explosive limits.	Upper flammable limit: 38.5% vol/vol Lower flammable limit: 1.7% vol/vol
Vapor pressure.	455 mmHg @ 20 ºC
Vapor density.	2.0 (Air = 1)
Relative density.	0.833 at 20 ºC
Solubility (ies).	39.5% in water @ 20 ºC
Partition coefficient: n-octanol/water.	0.03
Autoignition temperature.	869 ºF (465 ºC)
Decomposition temperature.	No applicable information found
Viscosity.	0.29 centipoise at 77 ºF
Oxidizing properties.	Not an oxidizer

10. STABILITY AND REACTIVITY	
10.1. Reactivity.	Not reactive under normal conditions.
10.2. Chemical stability.	STABILITY: Material is stable for extended periods in closed, airtight, pressurized containers at room temperature, under normal storage and handling conditions. Vapors may explode when exposed to common ignition sources.
10.3. Possibility of hazardous reactions.	HAZARDOUS POLYMERIZATION: Polymerization reaction can occur when propylene oxide is contaminated or when heated.
10.4. Conditions to avoid (e.g., static discharge, shock or vibration).	CONDITIONS TO AVOID: Avoid contact of propylene oxide with incompatible chemicals. Prevent exposure to all sources of ignition such as heat, flame, lighted tobacco products or electrical or mechanical sparks.
10.5. Incompatible materials.	See section 7.2
10.6. Hazardous decomposition products.	HAZARDOUS DECOMPOSITION PRODUCTS: Propylene oxide undergoes thermal decomposition to form carbon dioxide and carbon monoxide gases.

11. TOXICOLOGICAL INFORMATION	
11.1. Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact);	PRIMARY ROUTES OF EXPOSURE: Inhalation; eye contact; skin contact/absorption.
11.2. Symptoms related to the physical, chemical and toxicological characteristics;	**ACUTE HEALTH EFFECTS:**

	INHALATION: Inhaling concentrated vapor may cause serious health effects, possibly death. Inhalation may cause mucous membrane and respiratory irritation, CNS depression, nausea, vomiting, lachrimation, dypsnea, changes in salivary glands, iritis, muscle weakness, headaches, dizziness, coughing, narcosis, drunkenness, loss of coordination. NOTE: Propylene oxide has a high odor threshold (> 200 ppm) and the sense of smell may not provide adequate protection against its toxic effects. EYE CONTACT: Liquid propylene oxide is severely irritating and corrosive to the eyes and contact can cause swelling of the conjunctiva and irreversible corneal injury. Vapors may cause eye irritation, tearing, redness and swelling of the conjunctiva. SKIN CONTACT: Prolonged contact with liquid propylene oxide can cause severe irritation with redness, pain, severe burns, and formation of blisters. Propylene oxide may be absorbed by the skin in harmful amounts causing systemic effects similar to those listed under ingestion and inhalation. Propylene oxide is a skin sensitizer and some individuals may suffer an allergic skin reaction. Skin contact may also cause allergic contact dermatitis in some exposed individuals. Dilute solutions may be more irritating than undiluted materials. INGESTION: This relatively unlikely route of exposure is expected to cause severe irritation and burns of the mouth and throat, abdominal pain, nausea, vomiting, collapse and coma. Aspiration may occur during swallowing or vomiting, resulting in lung damage.
11.3. Delayed and immediate effects and also chronic effects from short- and long-term exposure;	**CHRONIC HEALTH EFFECTS:** SKIN CONTACT: Prolonged or repeated exposure may cause delayed secondary burns, ulcers or superficial scarring. EYE CONTACT: No applicable information found. INHALATION: Studies with animals have shown chronic effects such as growth depression, lung and slight liver injury. INGESTION: Studies with animals have shown chronic effects such as loss of body weight, gastric irritation and slight liver injury. CARCINOGENICITY: **OSHA**: Not classified. **ACGIH** classifies propylene oxide as "A3" – confirmed animal carcinogen with unknown relevance to humans. **NTP** classifies propylene oxide as “RAHC” (reasonably anticipated to be a human carcinogen). **IARC** classifies propylene oxide in Group 2B (possibly carcinogenic to humans).

	NIOSH classifies propylene oxide as a potential occupational carcinogen.
11.4. Numerical measures of toxicity (such as acute toxicity estimates).	TOXICOLOGICAL - ACUTE INHALATION: LC_{50} (4 hr. exposure) 4000 ppm (male rat) Various mammalian species exposed to lethal concentrations of propylene oxide had symptoms of mucous membrane irritation, central nervous system depression, lacrimation, dypsnea, changes in salivary glands, nausea, vomiting, iritis and muscle weakness. TOXICOLOGICAL - CHRONIC INHALATION: Symptoms of chronic exposure are similar to those observed in acute studies. TOXICOLOGICAL - ACUTE DERMAL: Standard Draize test, rabbit – 50 mg/6 minutes – severe irritation. The acute dermal rabbit LD_{50} for this product is 1245 mg/kg. TOXICOLOGICAL - CHRONIC DERMAL: No chronic dermal toxicity datum is available on this product. TOXICOLOGICAL - EYE: Standard Draize test, rabbit – 20 mg – severe irritation. TOXICOLOGICAL - ACUTE INGESTION: The acute oral LD_{50} for this product is: 380 mg/kg, rat TOXICOLOGICAL - CHRONIC INGESTION: A single oral study in rats showed changes in the brain, liver and lung. CARCINOGENICITY: Propylene oxide appears to induce cancers at the site of exposure in experimental animals. Sarcomas occurred at injection sites, and nasal and GI cancers occurred with chronic exposure. MUTAGENICITY: Propylene oxide has been found to be mutagenic in experimental animals including salmonella typhimurium, escherichia coli, drosophila spermatozoa and spermatids, and neurospora crassa assays. Human data on mutagenicity is inconclusive although propylene oxide causes DNA strand breaks in human diploid fibroblasts in vitro. The mean chromosome aberration rate in workers with more than 20 years exposure to propylene oxides was significantly increased compared to controls. NEUROTOXICITY: In high concentrations propylene oxide has caused CNS effects, including CNS depression, headache, motor weakness, loss of coordination, ataxia, coma, and neuropathy in experimental animal studies. Peripheral neuropathy has been reported in chronic studies with experimental

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	animals. REPRODUCTIVE EFFECTS: Effects on fertility and paternal effects have been noted in experimental animals. TERATOLOGY: Inhalation development toxicity studies with rats exposed to propylene oxide vapor at concentrations of 500 ppm showed fetotoxicity and developmental abnormalities. TARGET ORGANS: Overexposure to this product may affect the skin, eyes, respiratory system, reproductive system and central nervous system.

12. ECOLOGICAL INFORMATION	
12.1. Ecotoxicity (aquatic and terrestrial, where available).	AQUATIC TOXICITY: Acute LC_{50} data: 170 mg/L/24 hr, goldfish (Carassius auratus) 89 ppm/96 hr, mullet Material is slightly toxic to marine invertebrates.
12.2. Persistence and degradability.	CHEMICAL FATE INFORMATION: BODT (BOD Theoretical): 8%. If released to the atmosphere, propylene oxide will react in the vapor phase with photochemically produced hydroxyl radicals with an estimated half-life of approximately 30 days. Atmospheric removal by rainfall may occur. If released to water, propylene oxide will hydrolyze at estimated half-life rates of 11.6 days (at pH's 7-9) and 6.6 days (at pH 5) at 25 deg C.) Adsorption to sediment and reaction with photochemically produced hydroxyl radicals in water are not expected to be environmentally important fate processes.
12.3. Bioaccumulative potential.	Log octanol/water partition coefficient (log Kow) is low. Partitioning from water to oil is low. Bioconcentration is not expected to occur due to high water solubility and a low log Kow. Bioconcentration in aquatic organisms is not expected to be an environmentally important fate process.
12.4. Mobility in soil.	If released to soil, propylene oxide is expected to be susceptible to leaching and chemical hydrolysis in moist soils. It is expected to evaporate relatively rapidly from dry soil surfaces.
12.5. Results of PBT and vPvB	No applicable information found.
12.6. Other adverse effects.	No applicable information found.

13. DISPOSAL CONSIDERATIONS	
13.1. Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging.	WASTE MANAGEMENT/DISPOSAL: When disposed, propylene oxide is a RCRA hazardous waste with waste code D001 (ignitability). **DO NOT INCINERATE ANY PROPYLENE OXIDE CONTAINERS**. Dispose of waste materials in accordance with all applicable Federal, State and local laws and regulations.

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14. TRANSPORT INFORMATION	
14.1. UN number.	UN 1280
14.2. UN proper shipping name.	Propylene Oxide
14.3. Transport hazard class (es).	DOT Primary: 3 (Flammable Liquid); Reportable Quantity 100 lb (45.4 kg) IMO Primary: 3 (Flammable Liquid) TDG (from or within Canada) Primary: 3 (Flammable Liquid) Shipments of residual amounts of propylene oxide are considered hazardous material. All facilities shipping or receiving propylene oxide are subject to registration as a shipper of hazardous material (49 CFR 107, Subpart G). All facilities handling propylene oxide in containers greater than 3,000 liters (792 gallons) must also maintain a written security plan (49 CFR 172.00 – 804, 49 CFR 172.704).
14.4. Packing group, if applicable.	I
14.5. Marine pollutant (Yes/No).	No
14.6. Special precautions which a user needs to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises.	See Section 7.2
14.7. Transportation in bulk according to Annex II of MARPOL 73/78 and the IBC Code.	No applicable information found.

15. REGULATORY INFORMATION		
15.1. Safety, health and environmental regulations specific for the product in question.		
US Federal:	CERCLA:	Section 103: Reportable Quantity – 100 lb (40 CFR 302.4)
	CWA:	Release into a waterway may require reporting to the National Response Center @ 800-424-8802 (40 CFR 116.4).
	RCRA:	If discarded in purchased form, this product is a characteristic hazardous waste D001 (ignitability). However, under RCRA, it is the responsibility of the product user to determine at the time of disposal whether a material containing the product or derived from the product should be classified as a hazardous waste (40 CFR 261).
	RMP:	Listed under the EPA Chemical Accidental Prevention Provisions (Risk Management Plan: 40 CFR 68.130) as a Flammable with a 10000 lb Threshold Quantity.
	SARA TITLE III:	Section 302 Extremely Hazardous Substances – Listed; 10000 lb Threshold Planning Quantity (40 CFR 355 Appendix A) Section 304 – Listed 100 lb Reportable Quantity (40 CFR 302.5) Section 311/312 Hazard Categories – Acute, Chronic, Fire, Reactive, Sudden Release (40 CFR 370.66) Section 313 Toxic Chemicals – Listed (40 CFR 372.65)
	TSCA:	On TSCA inventory.
	Other EPA	EPA list of Hazardous Air Contaminants: Listed EPA Organic Hazardous Air Pollutant (HAP) list (40 CFR 61.01): Listed EPA list of Pesticide Chemicals (40 CFR 180.491): Listed EPA NESHAPS (40 CFR 63.100-106) VOC Rule: 100% VOC

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	FDA/USDA:	Not applicable.
	OSHA:	This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.
	Other OSHA:	Not Listed under the Process Safety Management standard (29 CFR 1910.119).
US State:	California Proposition 65: Listed; cancer hazard. Notice: This product contains a chemical known to the State of California to cause cancer. California Director's List: Listed Florida Hazardous Substance List: Listed Massachusetts Extraordinarily Hazardous Substance List: Listed Minnesota Hazardous Substance List: Listed New Jersey Hazardous Substance List: Listed sn 1615 Pennsylvania Right-to-know List: Listed (Special Hazardous Substance; Environmental Hazardous Substance)	
Canadian:	DSL:	Listed as methyloxirane (published 21 December 2011)
	WHMIS:	Ingredient Disclosure List: Listed 1%, item 1365 (1319) Classification: B2; D1B; D2A; D2B; F This SDS is not intended for use in Canada and my not comply with the Canadian Controlled Product Regulations.

EU:	CLP:	This SDS is not intended for use in the European Union.
	EINECS:	
	REACH:	
	Safety Data Sheets:	

16. OTHER INFORMATION INCLUDING INFORMATION ON PREPARATION AND REVISION		
Last Revision Date:	See top of each page under 'Effective Date'	
Reason for Issue:	Rev New supersedes Rev. 13 Feb 2012	Reformatted per OSHA GHS. Added part 10.1. Indicated SDS is not intended for Canada or EU. Added metallic plug info to 5.2. Added 'Sudden Release' to SARA. Completed spell check. Updated citations. Corrected RQ in Section 6.2.
	A	Remove contact information for Canutec
	B	Added Corrosivity to section 9 physical and chemical properties to support 29 CFR 1910.119(d)(1)
Risk Phrases Used:	See Section 2.	
Hazard Ratings:	See Section 5.2	

THE FOLLOWING ABBREVIATIONS MAY BE USED IN THIS DOCUMENT:	
ACGIH	American Council of Governmental Industrial Hygienists
AICS	Australian Inventory of Chemical Substances
BOD 5, 10, 20	Biochemical Oxygen Demand, 5, 10 or 20 day
CAS	Chemical Abstract Service
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
CLP	Classification, Labeling and Packaging
CNS	Central nervous system
CWA	Clean Water Act
D.O.T. or DOT	Department of Transportation
DSL	Domestic Substance List (Canada)
EC_{50}	Effective concentration which induces a response halfway between the baseline and maximum.
EC	European Community
ECL	Existing Chemicals List (Korea)
EINECS	European Inventory of Existing Commercial Substances

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EPA	Environmental Protection Agency
EU	European Union
FDA	Food and Drug Administration
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
GHS	Globally Harmonized System
HAP	Hazardous Air Pollutant
HMIS	Hazardous Materials Information System
IARC	International Agency for Research on Cancer
IBC	International Bulk Chemical Code
IDL	Ingredient disclosure list
IDLH	Immediately Dangerous to Life and Health
IMO	International Maritime Organization
K_{St}	Deflagration Index
LC_{50}	Median lethal concentration for 50% mortality of subject species by the inhalation route
LD_{50}	Median lethal dose for 50% mortality of subject species by the oral or dermal route
LD_{LO}	Median lethal dose low; the lowest dose of a substance introduced by any route other than inhalation reported to have caused death in humans or animals.
LEL / LFL	Lower Explosive Limit / Lower Flammable Limit
MARPOL	International Convention for the Prevention of Pollution from Ships
MSHA	Mine Safety Health Administration
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NFPA	National Fire Protection Association
NIOSH	National Institute of Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PBT	Persistent Bioaccumulative Toxic
PEL	Permissible Exposure Limit (default 8 hour day, 40 hour week TWA)
p/p	Parts per part
Ppm	Parts per million
p.s.i.g. or psig	Pounds per square inch (gauge pressure)
PSM	Process Safety Management
PVC	Polyvinyl chloride
RCRA	Resource Conservation and Recovery Act
REACH	Registration, Evaluation, Authorization and Restriction of Chemical Substances
REL	Recommended Exposure Limit (default 10 hour day, 40 hour week TWA)
RMP	Risk Management Plan
SARA	Superfund Amendment and Reauthorization Act of 1990
SCBA	Self-contained breathing apparatus
STEL	Short Term Exposure Limit (default 15 minute TWA)
TD_{LO}	Lowest dose to which humans or animals have been exposed and reported to produce a toxic effect other than cancer
TDG	Transportation of Dangerous Goods
TLV	Threshold limit value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
UFL	Upper Flammable Limit
USDA	United States Department of Agriculture
VOC	Volatile organic chemical
vPvB	Very Persistent, Very Bioaccumulative
WHMIS	Workplace Hazardous Material Information System Regulations

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