

SAFETY DATA SHEET

M49062 - ANSI - EN



Ingleside
Ethylene
LLC.

ETHYLENE

SDS No.: M49062
Rev. Num. 00-New

SDS Revision Date: 16-Jan-2017

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Identification:	Occidental Chemical Corporation 5005 LBJ Freeway P.O. Box 809050 Dallas, TX 75380-9050 1-800-752-5151
24 Hour Emergency Telephone Number:	1-800-733-3665 or 1-972-404-3228 (USA); CANUTEC (Canada): 1-613-996-6666; CHEMTREC (within USA and Canada): 1-800-424-9300; CHEMTREC (outside USA and Canada): +1 703-527-3887; CHEMTREC Contract No: CCN16186
To Request an SDS:	MSDS@oxy.com or 1-972-404-3245
Customer Service:	1-800-752-5151 or 1-972-404-3700
Synonyms:	ETHENE, OLEFIANT GAS, ELAYL, ACETENE, BICARBURRETTED HYDROGNE, ETHERIN
Product Type:	Chemical Intermediate
Chemical Family:	OLEFIN HYDROCARBON; ALKENE

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SECTION 2. HAZARDS IDENTIFICATION

OSHA REGULATORY STATUS: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

EMERGENCY OVERVIEW:

Color: Colorless
Physical State: Gas Liquefied gas
Odor: Mildly sweet odor
Signal Word: **DANGER**

MAJOR HEALTH HAZARDS: SIMPLE ASPHYXIANT. MAY CAUSE THERMAL BURNS.

PHYSICAL HAZARDS: Extremely flammable gas under pressure.

PRECAUTIONARY STATEMENTS: Keep away from heat/ sparks/ open flames/ hot surfaces. - No smoking.
 Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so.
 Protect from sunlight. Store in a well-ventilated place.

GHS CLASSIFICATION:

GHS: PHYSICAL HAZARDS:	Flammable Gas - Cat. 1 Extremely Flammable Gas Under Pressure - Liquefied
GHS: SUPPLEMENTAL HAZARD:	• Thermal Hazard
GHS - OSHA Hazard(s)	• Simple Asphyxiant: May displace oxygen and cause rapid suffocation • Contact with liquid or rapidly expanding gas may cause frostbite to contacted tissue (eyes, skin, etc.)

GHS SYMBOL: Flame, Gas cylinder



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GHS SIGNAL WORD: DANGER

GHS HAZARD STATEMENTS:

GHS - Physical Hazard Statement(s)

- Extremely flammable gas
- Contains gas under pressure; may explode if heated

GHS - Precautionary Statement(s) - Prevention

- Keep away from heat/sparks/open flames/hot surfaces. — No smoking

GHS - Precautionary Statement(s) - Response

- Leaking gas fire: Do not extinguish, unless leak can be stopped safely
- Eliminate all ignition sources if safe to do so

GHS - Precautionary Statement(s) - Storage

- Protect from sunlight
- Store in a well-ventilated place

GHS - Precautionary Statement(s) - Disposal

- There are no Precautionary Statement(s) - Disposal phrases assigned

Health Hazards Not Otherwise Classified

- Simple Asphyxiant - May displace oxygen and cause rapid suffocation
- Thermal Hazard: Contact with liquid or rapidly expanding gas may cause frostbite to contacted tissue (eyes, skin, etc.)

See Section 11: TOXICOLOGICAL INFORMATION

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: ETHENE, OLEFIANT GAS, ELAYL, ACETENE, BICARBURETTED HYDROGNE, ETHERIN

Component	Percent [%]	CAS Number
Ethylene	99.9-100	74-85-1

SECTION 4. FIRST AID MEASURES

General Advice: The acute toxicity of ethylene is low, but very high concentrations may cause asphyxia due to oxygen displacement. Liquid ethylene may cause frostbite injuries to the skin or eye.

Most Important Symptoms/Effects (Acute and Delayed):

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Acute Symptoms/Effects:

Skin: If spilled on skin, rapid evaporation can cause local frostbite with redness, blistering, and scaling.

Eye: Eye Irritation. Rapid evaporation can cause local frostbite with corneal and conjunctival irritation or burns. High concentrations of vapor can cause eye irritation.

Delayed Symptoms/Effects:

Interaction with Other Chemicals Which Enhance Toxicity: Any condition that reduces oxygenation.

Protection of First-Aiders: Direct contact with liquid or rapidly expanding gas may cause frostbite to contacted tissue (eyes, skin, etc.). This is a highly flammable material, handle with extreme care.

Notes to Physician: This gas is a simple asphyxiant. There is no specific toxicity, and no antidotes. Follow treatment protocols for rapid onset hypoxia and hypoxemia affecting cardiopulmonary or other organ function. Removal from exposure, respiratory support and oxygen administration with monitoring are initial priorities. Further treatment is largely supportive. Widespread non-specific ST segment changes with T wave flattening may occur. Cardiac failure may ensue. With hydrocarbon simple asphyxiants, caution on use of catecholamines (inotropes or pressors) seem prudent, especially in the early course of the poisoning when ethylene blood levels will be highest.

SECTION 5. FIRE-FIGHTING MEASURES

Fire Hazard: EXTREMELY FLAMMABLE GAS.

Explosive properties: Ethylene-air mixture of from 3-28% ethylene and ethylene-O₂ mixture of from 3-80% ethylene are explosive.

Unusual Hazards: Cold gas is heavier than air and will collect and stay in low areas. Gas may travel long distances to ignition sources and flashback. Gas in confined areas (e.g., tanks, sewers, buildings) may explode when exposed to fire. Contact with liquid may cause frostbite. Ethylene floats and boils on water.

Fire Fighting: For containers exposed to fire evacuate the area in all directions because of the risk of a boiling liquid expanding vapor explosion (BLEVE). Do not extinguish the fire unless the flow of the gas can be stopped and any remaining gas is out of the line. Specially trained personnel may use fog lines to cool exposures and let the fire burn itself out. Cool exposed non-cryogenic containers with large quantities of water from unattended equipment or remove intact containers if it can be done safely. If cooling streams are ineffective (venting sound increases in volume and pitch, tank discolors or shows any signs of deforming), withdraw immediately to a secure location. **DO NOT APPLY WATER TO CRYOGENIC LIQUID CONTAINERS**, if cryogenic liquid containers are exposed to direct flame or elevated temperatures for prolonged times, withdraw immediately to a secure location.

Lower Flammability Level (air): 2.7% by volume

Upper Flammability Level (air): 36% by volume

Flash point: -136 °C (-213 °F; 137 K)

Auto-ignition Temperature: 450 °C (842 °F)

GHS - OSHA Hazard(s) Simple Asphyxiant: May displace oxygen and cause rapid suffocation Contact with

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liquid or rapidly expanding gas may cause frostbite to contacted tissue (eyes, skin, etc.)

GHS: PHYSICAL HAZARDS:

- Flammable Gas - Cat. 1 Extremely Flammable
- Gas Under Pressure - Liquefied

SECTION 6. ACCIDENTAL RELEASE MEASURES

Occupational Release: Evacuate unnecessary personnel and eliminate all sources of ignition. Vapors or gases may ignite at distant ignition sources and flash back. Evacuation: Large spill: Consider initial downwind evacuation for at least 800 meters (1/2 mile). Fire: If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions. A spill or release of this material may trigger the emergency release reporting requirements under SARA, Title III (40 CFR, Part 355) and/or CERCLA (40 CFR, Part 300). CAUTION: When in contact with refrigerated/cryogenic liquids, many materials become brittle and are likely to break without warning. Do not apply water directly to a leak. Allow liquid to evaporate from surface.

Personal Precautions:

Stay upwind and keep out of low areas. For container exposed to fire evacuate the area in all directions because of the risk of BLEVE or explosion. Stop leak if possible without personal risk. Reduce vapors with water spray. Ventilate confined area if it can be done without placing personnel at risk. Isolate area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Refer to Section 7, Handling, for additional precautionary measures.

Environmental Precautions:

Prevent product from entering drains. Contain runoff from fire control and dilution water. Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Methods and Materials for Containment and Cleaning Up:

Stop flow of gas from remote area. Keep unnecessary people away, isolate hazard area and deny entry. For large spill, consider evacuation for downwind areas. Take precautionary measures against static discharges. Flammable vapors may accumulate in closed containers.

Additional Disaster Prevention Measures:

The primary hazard from a large release of ethylene is fire. Eliminate all sources of ignition immediately if a release of ethylene should occur. The public should be warned of any downwind vapor explosion hazards. Vapors may travel long distances and ignite or cause a vapor flash back to occur.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling:

To avoid ignition by static electricity discharge, equipment must be bonded and grounded. Bond and ground all equipment when transferring from one vessel to another. Most vapors are heavier than air and will spread along ground and collect in low or confined areas (drains, basements, tanks). Use non-sparking tools and equipment. Do

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not use cutting or welding torches, open flames or electric arcs on empty or full containers. Ensure adequate ventilation, especially in confined areas. Auto-refrigeration: Drains can be plugged and valves may become inoperable because of the formation of ice when expanding vapors or vaporizing liquids cause temperatures to drop below the freezing point of water.

Safe Storage Conditions:

Store in a cool, well-ventilated area away from possible sources of ignition. Avoid heat, flames, sparks, static electricity, and other sources of ignition. Protect from physical damage. Outdoor or detached storage is preferred. For indoor storage, use a fireproof, well-ventilated area isolated from any sources of ignition. Ample fire water supply should be available. A fixed sprinkler/deluge system is recommended. All equipment used when handling the product must be grounded.

Incompatibilities/ Materials to Avoid:

Incompatible with acids, chlorine and other halogens, aluminum chloride, benzoyl peroxide, carbon tetrachloride, bromotrichloromethane, chlorine dioxide, nitrogen dioxide, ozone, and oxidizing agents

GHS - OSHA Hazard(s)

Simple Asphyxiant: May displace oxygen and cause rapid suffocation Contact with liquid or rapidly expanding gas may cause frostbite to contacted tissue (eyes, skin, etc.)

GHS: PHYSICAL HAZARDS:

- Flammable Gas - Cat. 1 Extremely Flammable
- Gas Under Pressure - Liquefied

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Regulatory Exposure Limit(s): No occupational exposure limits have been established at this time.

OEL: Occupational Exposure Limit; OSHA: United States Occupational Safety and Health Administration; PEL: Permissible Exposure Limit; TWA: Time Weighted Average; STEL: Short Term Exposure Limit

NON-REGULATORY EXPOSURE LIMIT(S): Listed below are the product components that have advisory (non-regulatory) occupational exposure limits (OEL's) established.

Component	ACGIH TWA	ACGIH STEL	ACGIH Ceiling	OSHA TWA (Vacated)	OSHA STEL (Vacated)	OSHA Ceiling (Vacated)
Ethylene	200 ppm	-----	-----	-----	-----	-----

- The Non-Regulatory United States Occupational Safety and Health Administration (OSHA) limits, if shown, are the Vacated 1989 PEL's (vacated by 58 FR 35338, June 30, 1993).

- The American Conference of Governmental Industrial Hygienists (ACGIH) is a voluntary organization of professional industrial hygiene personnel in government or educational institutions in the United States. The ACGIH develops and publishes recommended occupational exposure limits each year called Threshold Limit Values (TLVs) for hundreds of chemicals, physical agents, and biological exposure indices.

ENGINEERING CONTROLS: Use closed systems when possible. Ensure adequate ventilation, especially in confined areas. Use explosion proof equipment and lighting in classified/controlled areas.

PERSONAL PROTECTIVE EQUIPMENT:

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Eye Protection: Wear appropriate eye protection to prevent eye contact with the liquid that could result in burns or tissue damage from frostbite. Tightly fitting safety goggles. Eye wash bottle with pure water.

Skin and Body Protection: Consider using flame resistant, anti-static safety clothing and footwear. When potential for contact exists, wear impervious protective garments suitable for contact potential such as: chemical and water resistant head/neck cover, aprons, jackets, pants, coveralls, boots, etc.

Hand Protection: Product in liquid form presents a thermal hazard. Thermally protective gloves are recommended. Any specific glove information provided is based on published literature and glove manufacturer data. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves.

Respiratory Protection: Where engineering controls are not adequate in eliminating exposure, or for spills and/or emergencies, a NIOSH approved self-contained breathing apparatus or airline respirator, with full face piece and operated in the pressure demand mode is required. Availability of an escape bottle for airline respirators may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or in unknown or concentrations that exceed IDLH.

Other Protective Equipment: Hard hats and ear protection should be worn when working with pressurized containers or equipment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Gas, Liquefied gas
Color:	Colorless
Odor:	Mildly sweet odor
Molecular Weight:	28.05
Molecular Formula:	C ₂ H ₄
Chemical Family:	OLEFIN HYDROCARBON; ALKENE
Boiling Point/Range:	-102.4 °C @ 700 mm Hg
Melting Point/Range:	-169 (°C)
Vapor Pressure:	5.21X10+4 mm Hg @ 25°C
Vapor Density (air=1):	0.978
Relative Density/Specific Gravity (water=1):	50.5678 g/cu cm @ -104 °C
pH:	Not applicable
Partition Coefficient (n-octanol/water):	Log Kow = 1.13
Flash point:	-136 °C (-213 °F; 137 K)
Lower Flammability Level (air):	2.7% by volume
Upper Flammability Level (air):	36% by volume
Auto-ignition Temperature:	450 °C (842 °F)
Viscosity:	0.01 mPa.s @ 20°C

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SECTION 10. STABILITY AND REACTIVITY

Chemical Stability: Stable under recommended storage conditions.

Reactivity: Reacts vigorously with oxidizing materials. Explosive reaction with chlorine is possible.

Conditions to Avoid: Ethylene is spontaneously explosive with chlorine in sunlight.

Incompatibilities/ Materials to Avoid: Incompatible with acids, chlorine and other halogens, aluminum chloride, benzoyl peroxide, carbon tetrachloride, bromotrichloromethane, chlorine dioxide, nitrogen dioxide, ozone, and oxidizing agents.

Hazardous Polymerization: Hazardous polymerization may occur.

SECTION 11. TOXICOLOGICAL INFORMATION

TOXICITY DATA:

PRODUCT TOXICITY DATA: ETHYLENE

Note: See component data below.

COMPONENT TOXICITY DATA:

Note: The component toxicity data is populated by the LOLI database and may differ from the product toxicity data given.

Component	LD50 Oral:	LD50 Dermal:	LC50 Inhalation:
Ethylene 74-85-1	Not relevant. Ethylene is a gas with a low boiling point	Not Listed	LC50 rat >12.518 mg/l

POTENTIAL HEALTH EFFECTS:

- Eye contact:** Eye contact may cause frostbite, tearing, redness, pain, conjunctival irritation, corneal edema, whitening, decreased vision.
- Skin contact:** Direct skin contact with liquid or rapidly expanding gas may cause frostbite.
- Inhalation:** This material is a simple asphyxiant. The symptoms of asphyxia depend on the rapidity with which the oxygen deficiency develops and how long it continues. In sudden acute asphyxia, unconsciousness may be immediate. With slow development there may be rapid respiration and pulse, air hunger, dizziness, reduced awareness, tightness in the head, tingling sensations, incoordination, faulty judgment, emotional instability, and rapid fatigue. As the asphyxia progresses, nausea, vomiting, collapse, unconsciousness, convulsions, deep

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coma and death are possible.

Ingestion: Ingestion can cause burns similar to frostbite.

Chronic Effects: None known.

SIGNS AND SYMPTOMS OF EXPOSURE:

Simple Asphyxiation. Acute inhalation may result in loss of consciousness with no warning due to displacement of oxygen. May cause other symptoms of hypoxia depending upon the oxygen level, such as air hunger, fatigue, increased pulse. Symptoms are due to hypoxia. Above 18% Oxygen, no symptoms. 12-16% oxygen, shortness of breath, rapid heart rate, disturbed muscular coordination. 10-14% oxygen, emotional upset, abnormal fatigue, disturbed respiration. 6-10% oxygen, nausea, vomiting, collapse, loss of consciousness. Less than 6% oxygen, convulsion, respiratory cessation, asystole within minutes.

Skin: If spilled on skin, rapid evaporation can cause local frostbite with redness, blistering, and scaling.

Eye: Eye Irritation. Rapid evaporation can cause local frostbite with corneal and conjunctival irritation or burns. High concentrations of vapor can cause eye irritation.

TOXICITY:

Simple asphyxiant gasses are considered inert with minimal primary toxicity. Symptoms are due to hypoxia.

Interaction with Other Chemicals Which Enhance Toxicity: Any condition that reduces oxygenation.

GHS HEALTH HAZARDS:

Carcinogenicity comment: No clear evidence of toxic effects of exposure of humans or animals to ethylene has been reported. However, it has been shown in both animal and human studies that inhaled ethylene can be metabolized to ethylene oxide. Epidemiologic as well as experimental data concludes that ethylene oxide is a carcinogen.

SPECIFIC TARGET ORGAN TOXICITY (Single Exposure):

The substance is not classified as a specific target organ toxicant after single exposure

SPECIFIC TARGET ORGAN TOXICITY (Repeated or Prolonged Exposure):

The substance is not classified as a specific target organ toxicant - upon repeated exposure

MUTAGENIC DATA:

Ethylene has tested negative for mutagenicity in in vitro and in vivo test systems.

REPRODUCTIVE TOXICITY:

Ethylene has not been associated with adverse effects on reproduction.

ASPIRATION HAZARD:

Not Known

METABOLISM:

Not available.

IMMUNOTOXICITY:

Not available.

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ENDOCRINE DISRUPTOR:

This product does not contain any known or suspected endocrine disruptors.

TOXICOKINETICS:

Not available.

NEUROTOXICITY:

Not Available.

Health Hazards Not Otherwise Classified

- Simple Asphyxiant - May displace oxygen and cause rapid suffocation
 - Thermal Hazard: Contact with liquid or rapidly expanding gas may cause frostbite to contacted tissue (eyes, skin, etc.)
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SECTION 12. ECOLOGICAL INFORMATION

ECOTOXICITY DATA:

Aquatic Toxicity:

It has been well documented through relevant toxicity studies that the minute amounts measured in water implies little environmental hazard to the organisms in this compartment

FATE AND TRANSPORT:

BIODEGRADATION: Biodegradation in water has half-lives in the range of 1-28 days, and even slower under anaerobic conditions where half-lives are 3 to 112 days.

PERSISTENCE: Will not persist.

BIOCONCENTRATION: This material will not bioconcentrate.

BIOACCUMULATIVE POTENTIAL: Does not bioaccumulate.

MOBILITY IN SOIL: Adsorption to solid soil phase is not expected.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste from material:

Do not discharge directly to sewer or surface waters. May be hazardous under U.S. EPA RCRA regulations. Treatment, storage, transportation and disposal must be in accordance with EPA and State regulations under the authority of the Resource Conservation and Recovery Act (RCRA) 40 CFR parts 260-271. Dispose of by properly licensed incineration facility.

Container Management:

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Product is typically shipped via pipeline. Note that both empty pipelines and containers, if applicable, may contain product residue and can be flammable. Do not attempt to refill, pressurize, or clean pipelines/containers without proper instructions. Empty containers should be offered for recycling, recovery, or disposal through qualified and licensed disposal facility in accordance with governmental regulations. DO NOT CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY. OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

SECTION 14. TRANSPORT INFORMATION

IMPORTANT: Transport of LPGas is controlled in accordance with the requirements of the ADG Code and the Load Restraint Guide. For emergency response use ERG 115.

LAND TRANSPORT

U.S. DOT 49 CFR 172.101:

UN NUMBER: UN1962
PROPER SHIPPING NAME: ETHYLENE, NON-ODORIZED
HAZARD CLASS/ DIVISION: 2.1
LABELING REQUIREMENTS: 2.1

* **NOTE:** When shipped as a compressed gas use: UN1962, ETHYLENE, 2.1. When shipped as a refrigerated liquid use UN1038, ETHYLENE, REFRIGERATED LIQUID, 2.1.

CANADIAN TRANSPORTATION OF DANGEROUS GOODS:

* **NOTE:** When shipped as a compressed gas use: UN1962, ETHYLENE, 2.1. When shipped as a refrigerated liquid use UN1038, ETHYLENE, REFRIGERATED LIQUID, 2.1.

LABELING REQUIREMENTS: 2.1

* **NOTE:** When shipped as a compressed gas use: UN1962, ETHYLENE, 2.1. When shipped as a refrigerated liquid use UN1038, ETHYLENE, REFRIGERATED LIQUID, 2.1.

SECTION 15. REGULATORY INFORMATION

U.S. REGULATIONS

OSHA REGULATORY STATUS:

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):

If a release is reportable under CERCLA section 103, notify the state emergency response commission and local

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emergency planning committee. In addition, notify the National Response Center at (800) 424-8802 or (202) 426-2675.

Component	CERCLA Reportable Quantities:
Ethylene	Not listed

SARA EHS Chemical (40 CFR 355.30)

If a release is reportable under EPCRA, notify the state emergency response commission and local emergency planning committee. If the TPQ is met, facilities are subject to reporting requirements under EPCRA Sections 311 and 312.

Component	EPCRA RQs	Section 302 Threshold Planning Quantity (TPQs)
Ethylene	Not listed	Not listed

EPCRA SECTIONS 311/312 HAZARD CATEGORIES (40 CFR 370.10):

Fire Hazard, Sudden Release of Pressure

SARA HAZARD CATEGORIES ALIGNED WITH GHS (2018):

Physical Hazard - Flammable
 Physical Hazard - Gas Under Pressure
 Health Hazard - Simple Asphyxiant
 Health Hazard - HNOC

EPCRA SECTION 313 (40 CFR 372.65):

The following chemicals are listed in 40 CFR 372.65 and may be subject to Community Right-to Know Reporting requirements

Component	Status:
Ethylene	1.0 %

NATIONAL INVENTORY STATUS

U.S. INVENTORY STATUS: Toxic Substance Control Act (TSCA): All components are listed or exempt.

TSCA 12(b): This product is not subject to export notification.

Canadian Chemical Inventory: All components of this product are listed on either the DSL or the NDSL.

Component	DSL	NDSL
Ethylene 74-85-1	Listed	Not Listed

STATE REGULATIONS

Component	California Proposition 65 Cancer WARNING:	California Proposition 65 CRT List - Male reproductive toxin:	California Proposition 65 CRT List - Female reproductive toxin:	Massachusetts Right to Know Hazardous Substance List	New Jersey Right to Know Hazardous Substance List	New Jersey Special Health Hazards Substance List
Ethylene	Not Listed	Not Listed	Not Listed	Listed	0873	flammable -

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74-85-1						fourth degree; reactive - second degree
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Component	New Jersey - Environmental Hazardous Substance List	Pennsylvania Right to Know Hazardous Substance List	Pennsylvania Right to Know Special Hazardous Substances	Pennsylvania Right to Know Environmental Hazard List	Rhode Island Right to Know Hazardous Substance List
Ethylene 74-85-1	Listed	Listed	Not Listed	Present	Listed

CANADIAN REGULATIONS

• This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations

Component	Canadian Chemical Inventory:	NDSL:	WHMIS - Classifications of Substances:
Ethylene	Listed Present (that participate in atmospheric photochemical reactions except those under item number 65 on the Toxic Substances List source)		A,B1,D2B

SECTION 16. OTHER INFORMATION

Prepared by: OxyChem Corporate HESS - Product Stewardship

Rev. Date: 16-Jan-2017

Reason for Revision:

• New Product

IMPORTANT:

The information presented herein, while not guaranteed, was prepared by technical personnel and is true and accurate to the best of our knowledge. NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, OR WARRANTY OR GUARANTY OF ANY OTHER KIND, EXPRESSED OR IMPLIED, IS MADE REGARDING PERFORMANCE, SAFETY, SUITABILITY, STABILITY OR OTHERWISE. This information is not intended to be all-inclusive as to the manner and conditions of use, handling, storage, disposal and other factors that may involve other or additional legal, environmental, safety or performance considerations, and Occidental Chemical Corporation assumes no liability whatsoever for the use of or reliance upon this information. While our technical personnel will be happy to respond to questions, safe handling and use of the product remains the responsibility of the customer. No suggestions for use are intended as, and nothing herein shall be construed as, a recommendation to infringe any existing patents or to violate any Federal, State, local or foreign laws

OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, safety data sheets, training and access

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to written records. We request that you, and it is your legal duty to, make all information in this Safety Data Sheet available to your employees

End of Safety Data Sheet