

## Safety Data Sheet

**Section 1: Identification of the Substance/Mixture and of the Company/Undertaking****1.1 Product identifier**

<b>Product Name</b>	• <b>Ethylene</b>
<b>CAS Number</b>	• 74-85-1
<b>Product Code</b>	• MSDS No. 74-85-1/E-5

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

<b>Relevant identified use(s)</b>	• Precursor in chemical synthesis, fruit ripening
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**1.3 Details of the supplier of the safety data sheet**

<b>Manufacturer</b>	• Air Liquide 2700 Post Oak Blvd. Houston, TX 77056 United States www.us.airliquide.com sds@airliquide.com
<b>Telephone (Technical)</b>	• 713-896-2896
<b>Telephone (Technical)</b>	• 800-819-1704

**1.4 Emergency telephone number**

<b>Manufacturer</b>	• 800-424-9300 - CHEMTREC
<b>Manufacturer</b>	• +1 703-527-3887 - Outside United States

**Section 2: Hazards Identification****EU/EEC**

According to Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]

According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

**2.1 Classification of the substance or mixture**

<b>CLP</b>	• Flammable Gases 1 - H220 Compressed Gas - H280 Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects - H336
<b>DSD/DPD</b>	• Extremely Flammable (F+) R12, R67

**2.2 Label Elements**

CLP

**DANGER**



- Hazard statements**
- H220 - Extremely flammable gas
  - H280 - Contains gas under pressure; may explode if heated
  - H336 - May cause drowsiness or dizziness

**Precautionary statements**

- Prevention**
- P210 - Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
  - P261 - Avoid breathing fume/gas.
  - P271 - Use only outdoors or in a well-ventilated area.
- Response**
- P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
  - P381 - Eliminate all ignition sources if safe to do so.
  - P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  - P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
- Storage/Disposal**
- P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
  - P405 - Store locked up.
  - P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**DSD/DPD**



- Risk phrases**
- R12 - Extremely flammable.
  - R67 - Vapours may cause drowsiness and dizziness.
- Safety phrases**
- S9 - Keep container in a well ventilated place
  - S16 - Keep away from sources of ignition - No Smoking.

**2.3 Other Hazards**

**CLP**

- Contact with gas or liquefied gas will cause burns, severe injury and/or frostbite. According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

**DSD/DPD**

- Contact with gas or liquefied gas will cause burns, severe injury and/or frostbite. This product is considered dangerous according to the European Directive 67/548/EEC.

**United States (US)**

According to OSHA 29 CFR 1910.1200 HCS

**2.1 Classification of the substance or mixture**

**OSHA HCS 2012**

- Flammable Gases 1 - H220
- Compressed Gas - H280
- Eye Irritation 2A - H319
- Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects - H336
- Hazards Not Otherwise Classified - Health Hazard - Frostbite

**2.2 Label elements**

**OSHA HCS 2012**

**DANGER**



- Hazard statements**
- Extremely flammable gas - H220
  - Contains gas under pressure; may explode if heated - H280
  - Causes serious eye irritation - H319
  - May cause drowsiness or dizziness - H336

**Precautionary statements**

- Prevention**
- Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking. - P210
  - Avoid breathing fume/gas. - P261

Wash thoroughly after handling. - P264  
 Use only outdoors or in a well-ventilated area. - P271  
 Wear protective gloves/protective clothing/eye protection/face protection. - P280

- Response**
- Leaking gas fire: Do not extinguish, unless leak can be stopped safely. - P377
  - Eliminate all ignition sources if safe to do so. - P381
  - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. - P304+P340
  - Call a POISON CENTER or doctor/physician if you feel unwell. - P312
  - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - P305+P351+P338
  - If eye irritation persists: Get medical advice/attention. - P337+P313

- Storage/Disposal**
- Store in a well-ventilated place. Keep container tightly closed. - P403+P233
  - Store locked up. - P405
  - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501

## 2.3 Other hazards

### OSHA HCS 2012

- Contact with gas or liquefied gas will cause burns, severe injury and/or frostbite. Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

## Canada

### According to WHMIS

## 2.1 Classification of the substance or mixture

### WHMIS

- Other Toxic Effects - D2B
- Compressed Gas - A
- Flammable Gases - B1

## 2.2 Label elements

### WHMIS



- Compressed Gas - A
- Flammable Gases - B1
- Other Toxic Effects - D2B

## 2.3 Other hazards

### WHMIS

- Contact with gas or liquefied gas will cause burns, severe injury and/or frostbite. In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

## Section 3 - Composition/Information on Ingredients

### 3.1 Substances

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Ethylene	CAS:74-85-1 EC Number:200-815-3	>= 99%	NDA	EU DSD/DPD: Annex I - F+; R12; R67 EU CLP: Annex VI - Flam. Gas 1, H220; Press. Gas - Comp., H280; STOT SE 3, H336 OSHA HCS 2012: Eye Irrit. 2A; Press. Gas - Comp.; Flam. Gas 1;	NDA

## 3.2 Mixtures

- Material does not meet the criteria of a mixture in accordance with Regulation (EC) No 1272/2008.

## Section 4 - First Aid Measures

### 4.1 Description of first aid measures

#### Inhalation

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

#### Skin

- If frostbite has occurred, seek medical attention immediately; do NOT rub the affected area(s) or flush them with water. In order to prevent further tissue damage, do NOT attempt to remove frozen clothing from frostbitten areas. If frostbite has not occurred, immediately and thoroughly wash contaminated skin with soap and water.

#### Eye

- If eye tissue is frozen, seek medical attention immediately; if tissue is not frozen, immediately and thoroughly flush the eyes with large amounts of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation, pain, swelling, lacrimation or photophobia persist, get medical attention as soon as possible.

#### Ingestion

- If frostbite has occurred, seek medical attention immediately; do NOT rub the affected area(s) or flush them with water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting.

### 4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

### 4.3 Indication of any immediate medical attention and special treatment needed

#### Notes to Physician

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

### 4.4 Other information

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. RESCUERS SHOULD NOT ATTEMPT TO RETRIEVE VICTIMS OF EXPOSURE TO GASES WITHOUT ADEQUATE PERSONAL PROTECTIVE EQUIPMENT. At a minimum, Self-Contained Breathing Apparatus must be worn. Victim(s) who experience any adverse effect after over-exposure to this gas mixture must be taken for medical attention. Rescuers should be taken for medical attention if necessary. Take a copy of the label and the MSDS to physician or other health professional with victim(s).

## Section 5 - Firefighting Measures

### 5.1 Extinguishing media

#### Suitable Extinguishing Media

- SMALL FIRES: Dry chemical or CO<sub>2</sub>.  
LARGE FIRES: Water spray or fog.

#### Unsuitable Extinguishing Media

- No data available

### 5.2 Special hazards arising from the substance or mixture

#### Unusual Fire and Explosion Hazards

- EXTREMELY FLAMMABLE  
Will form explosive mixtures with air.  
Vapors may travel to source of ignition and flash back.  
Cylinders exposed to fire may vent and release flammable gas through pressure relief devices.

**Hazardous Combustion Products**

Containers may explode when heated.  
Ruptured cylinders may rocket.

- No data available

**5.3 Advice for firefighters**

- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.  
Always wear thermal protective clothing when handling refrigerated/cryogenic liquids. Wear positive pressure self-contained breathing apparatus (SCBA).  
**DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED**  
Move containers from fire area if you can do it without risk.  
**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.  
**FIRE INVOLVING TANKS:** ALWAYS stay away from tanks engulfed in fire.  
**FIRE INVOLVING TANKS:** Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.  
**FIRE INVOLVING TANKS:** Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.  
**FIRE INVOLVING TANKS:** Cool containers with flooding quantities of water until well after fire is out.  
**FIRE INVOLVING TANKS:** Do not direct water at source of leak or safety devices; icing may occur.  
**FIRE INVOLVING TANKS:** For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

**Section 6 - Accidental Release Measures****6.1 Personal precautions, protective equipment and emergency procedures****Personal Precautions**

- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material. Ventilate the area before entry.

**Emergency Procedures**

- **ELIMINATE** all ignition sources (no smoking, flares, sparks or flames in immediate area). As an immediate precautionary measure, isolate spill or leak area for at least 100 meters (330 feet) in all directions. Stop leak if you can do it without risk. Keep unauthorized personnel away. Keep out of low areas. Stay upwind. **LARGE SPILL:** Consider initial downwind evacuation for at least 800 meters (1/2 mile)

**6.2 Environmental precautions**

- No data available

**6.3 Methods and material for containment and cleaning up****Containment/Clean-up Measures**

- All equipment used when handling the product must be grounded. Stop leak if you can do it without risk.  
If possible, turn leaking containers so that gas escapes rather than liquid.  
Use water spray to reduce vapors; do not put water directly on leak, spill area or inside container.  
Do not direct water at spill or source of leak.  
Isolate area until gas has dispersed.

**6.4 Reference to other sections**

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

**Section 7 - Handling and Storage****7.1 Precautions for safe handling****Handling**

- Keep away from heat and ignition sources – No Smoking. Take precautionary measures against static charges. All equipment used when handling the product must

be grounded. Use only non-sparking tools. Use only with adequate ventilation. Ventilate closed spaces before entering. Be aware of any signs of dizziness or fatigue, especially if work is done in a poorly ventilated area; exposures to fatal concentrations of this gas mixture could occur without any significant warning symptoms, due to olfactory fatigue or oxygen deficiency. Cylinders should be firmly secured to prevent falling or being knocked-over. Use explosion-proof - electrical, ventilating and/or lighting equipment. Do not attempt to repair, adjust, or in any other way modify cylinders. If there is a malfunction or another type of operational problem, contact nearest distributor immediately. Empty containers retain product residue and can be hazardous. Do not cut, weld, puncture or incinerate container.

## 7.2 Conditions for safe storage, including any incompatibilities

### Storage

- Cylinders should be stored in dry, well-ventilated areas away from sources of heat, ignition and direct sunlight. Do not allow area where cylinders are stored to exceed 52C (125F). Cylinders must be protected from the environment, and preferably kept at room temperature approximately 21C (70F). Protect cylinders against physical damage. Cylinders should be firmly secured to prevent falling or being knocked-over. Store locked up.

## 7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

## Section 8 - Exposure Controls/Personal Protection

### 8.1 Control parameters

Exposure Limits/Guidelines			
	Result	ACGIH	Canada Ontario
Ethylene (74-85-1)	TWAs	200 ppm TWA	200 ppm TWA

### 8.2 Exposure controls

#### Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Use explosion-proof - electrical, ventilating and/or lighting equipment.

#### Personal Protective Equipment

##### Respiratory

- In case of insufficient ventilation, wear suitable respiratory equipment.

##### Eye/Face

- Wear safety glasses.

##### Skin/Body

- Wear leather gloves when handling cylinders.

#### Environmental Exposure Controls

- Follow best practice for site management and disposal of waste. Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

## Section 9 - Physical and Chemical Properties

### 9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Gas	Appearance/Description	Colorless gas with sweet odor.
Color	Colorless	Odor	Sweet odor.
Odor Threshold	Data lacking		
General Properties			
Boiling Point	-102.4 C(-152.32 F)	Melting Point	-169 C(-272.2 F)
Decomposition Temperature	Data lacking	pH	Data lacking

Specific Gravity/Relative Density	Not relevant	Density	0.974 g/mL @ 15 C(59 F)
Bulk Density	Data lacking	Water Solubility	Soluble
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
<b>Volatility</b>			
Vapor Pressure	35.04 @ 20 C(68 F)	Vapor Density	0.978 Air=1
Evaporation Rate	Data lacking		
<b>Flammability</b>			
Flash Point	-136.11 C(-212.998 F)	UEL	34 %
LEL	3 %	Autoignition	543 C(1009.4 F)
Flammability (solid, gas)	Flammable gas.		
<b>Environmental</b>			
Octanol/Water Partition coefficient	Data lacking		

## 9.2 Other Information

- No additional physical and chemical parameters noted.

## Section 10: Stability and Reactivity

### 10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

- Stable under normal temperatures and pressures.

### 10.3 Possibility of hazardous reactions

- No data available

### 10.4 Conditions to avoid

- No data available

### 10.5 Incompatible materials

- No data available

### 10.6 Hazardous decomposition products

- No data available

## Section 11 - Toxicological Information

### 11.1 Information on toxicological effects

GHS Properties	Classification
Acute toxicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Aspiration Hazard	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Carcinogenicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met

<b>Germ Cell Mutagenicity</b>	<b>EU/CLP</b> • Classification criteria not met <b>OSHA HCS 2012</b> • Classification criteria not met
<b>Skin corrosion/Irritation</b>	<b>EU/CLP</b> • Classification criteria not met <b>OSHA HCS 2012</b> • Classification criteria not met
<b>Skin sensitization</b>	<b>EU/CLP</b> • Classification criteria not met <b>OSHA HCS 2012</b> • Classification criteria not met
<b>STOT-RE</b>	<b>EU/CLP</b> • Classification criteria not met <b>OSHA HCS 2012</b> • Classification criteria not met
<b>STOT-SE</b>	<b>EU/CLP</b> • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects <b>OSHA HCS 2012</b> • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
<b>Toxicity for Reproduction</b>	<b>EU/CLP</b> • Classification criteria not met <b>OSHA HCS 2012</b> • Classification criteria not met
<b>Respiratory sensitization</b>	<b>EU/CLP</b> • Classification criteria not met <b>OSHA HCS 2012</b> • Classification criteria not met
<b>Serious eye damage/Irritation</b>	<b>EU/CLP</b> • Classification criteria not met <b>OSHA HCS 2012</b> • Eye Irritation 2A

## Potential Health Effects

### Inhalation

#### Acute (Immediate)

- Exposure to ethylene gas may affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death.

#### Chronic (Delayed)

- No data available

### Skin

#### Acute (Immediate)

- Contact with gas or liquefied gas will cause burns, severe injury and/or frostbite.

#### Chronic (Delayed)

- No data available

### Eye

#### Acute (Immediate)

- Contact with gas or liquefied gas will cause burns, severe injury and/or frostbite.

#### Chronic (Delayed)

- No data available

### Ingestion

#### Acute (Immediate)

- Ingestion is not anticipated to be a likely route of exposure to this product. Ingestion can cause burns similar to frostbite. If significant amounts are ingested, symptoms may include stomach pains and vomiting.

#### Chronic (Delayed)

- No data available

## Section 12 - Ecological Information

### 12.1 Toxicity

- No data available

### 12.2 Persistence and degradability

- No data available

### 12.3 Bioaccumulative potential

- No data available

### 12.4 Mobility in Soil

- No data available

### 12.5 Results of PBT and vPvB assessment

- PBT and vPvB assessment has not been conducted for this material.

## 12.6 Other adverse effects

### Section 13 - Disposal Considerations

#### 13.1 Waste treatment methods

##### Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

##### Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

### Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	UN1962	Ethylene	2.1	NDA	NDA
TDG	UN1962	ETHYLENE, COMPRESSED	2.1	NDA	NDA
IMO/IMDG	UN1962	ETHYLENE	2.1	NDA	NDA
IATA/ICAO	UN1962	Ethylene	2.1	NDA	NDA

#### 14.6 Special precautions for user

- Cylinders should be transported in a secure position, in a well-ventilated vehicle. The transportation of compressed gas cylinders in automobiles or in closed-body vehicles can present serious safety hazards. If transporting these cylinders in vehicles, ensure these cylinders are not exposed to extremely high temperatures (as may occur in an enclosed vehicle on a hot day). Additionally, the vehicle should be well-ventilated during transportation.

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Not relevant.

#### 14.8 Other information

**DOT** • Forbidden Passenger aircraft/rail.

**TDG** • Forbidden for Transport in Passenger carrying ship, Passenger Road Vehicle or Passenger Carrying Railway.

**IATA/ICAO** • Forbidden for Passenger aircraft/rail transport and Cargo aircraft.

### Section 15 - Regulatory Information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

**SARA Hazard Classifications** • No data available

State Right To Know				
Component	CAS	MA	NJ	PA
Ethylene	74-85-1	Yes	Yes	Yes

Inventory						
Component	CAS	Canada DSL	Canada NDSL	China	EU EINECS	EU ELNICS
Ethylene	74-85-1	Yes	No	Yes	Yes	No

Inventory (Con't.)				
Component	CAS	Japan ENCS	Korea KECL	TSCA
Ethylene	74-85-1	Yes	Yes	Yes

## Australia

### Labor

#### Australia - Work Health and Safety Regulations - Hazardous Substances Requiring Health Monitoring

• Ethylene 74-85-1 Not Listed

#### Australia - High Volume Industrial Chemicals List

• Ethylene 74-85-1

#### Australia - List of Designated Hazardous Substances - Classification

• Ethylene 74-85-1 F+ R12, R67

### Environment

#### Australia - National Pollutant Inventory (NPI) Substance List

• Ethylene 74-85-1 Not Listed

#### Australia - Ozone Protection Act - Scheduled Substances

• Ethylene 74-85-1 Not Listed

#### Australia - Priority Existing Chemical Program

• Ethylene 74-85-1 Not Listed

## Canada

### Labor

#### Canada - WHMIS - Classifications of Substances

• Ethylene 74-85-1 A, B1, D2B

#### Canada - WHMIS - Ingredient Disclosure List

• Ethylene 74-85-1 Not Listed

### Environment

#### Canada - CEPA - Priority Substances List

• Ethylene 74-85-1 Not Listed

## Europe

### Other

#### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

• Ethylene 74-85-1 F+; R12 R67

#### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

• Ethylene 74-85-1 Not Listed

#### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

• Ethylene 74-85-1 F+ R:12-67 S:(2)-9-16-33-45

#### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

• Ethylene 74-85-1 Not Listed

#### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

• Ethylene	74-85-1	S:(2)-9-16-33-45
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## Mexico

### Other

#### Mexico - Hazard Classifications

• Ethylene	74-85-1	Hazard Class = 2.1 UN1038; Hazard Class = 2.1 UN1962
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#### Mexico - Regulated Substances

• Ethylene	74-85-1	UN1038; UN1962
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## United States

### Labor

#### U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• Ethylene	74-85-1	Not Listed
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#### U.S. - OSHA - Specifically Regulated Chemicals

• Ethylene	74-85-1	Not Listed
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### Environment

#### U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Ethylene	74-85-1	Not Listed
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#### U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Ethylene	74-85-1	Not Listed
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#### U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Ethylene	74-85-1	Not Listed
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#### U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Ethylene	74-85-1	Not Listed
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#### U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Ethylene	74-85-1	Not Listed
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#### U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Ethylene	74-85-1	1.0 % de minimis concentration
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#### U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Ethylene	74-85-1	Not Listed
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#### U.S. - EPA - Designated Generic Categories - Aqueous Ammonia

• Ethylene	74-85-1	Not Listed
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#### U.S. - EPA - Designated Generic Categories - Certain Glycol Ethers

• Ethylene	74-85-1	Not Listed
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#### U.S. - EPA - Designated Generic Categories - Chlorophenols

• Ethylene	74-85-1	Not Listed
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#### U.S. - EPA - Designated Generic Categories - Dioxins and Dioxin-like Compounds

• Ethylene	74-85-1	Not Listed
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**U.S. - EPA - Designated Generic Categories - Ethylenebisdithiocarbamic Acid, Salts and Esters**

• Ethylene	74-85-1	Not Listed
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**U.S. - EPA - Designated Generic Categories - Lead and Lead Compounds**

• Ethylene	74-85-1	Not Listed
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**U.S. - EPA - Designated Generic Categories - Nicotine and Salts**

• Ethylene	74-85-1	Not Listed
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**U.S. - EPA - Designated Generic Categories - Nitrate Compounds**

• Ethylene	74-85-1	Not Listed
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**U.S. - EPA - Designated Generic Categories - Pesticides and Other PBTs**

• Ethylene	74-85-1	Not Listed
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**U.S. - EPA - Designated Generic Categories - Polychlorinated Alkanes**

• Ethylene	74-85-1	Not Listed
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**U.S. - EPA - Designated Generic Categories - Polycyclic Aromatic Compounds**

• Ethylene	74-85-1	Not Listed
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**U.S. - EPA - Designated Generic Categories - Strychnine and Salts**

• Ethylene	74-85-1	Not Listed
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**U.S. - EPA - Designated Generic Categories - Warfarin and Salts**

• Ethylene	74-85-1	Not Listed
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**U.S. - RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Appendix VII**

• Ethylene	74-85-1	Not Listed
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**U.S. - RCRA (Resource Conservation & Recovery Act) - Constituents for Detection Monitoring**

• Ethylene	74-85-1	Not Listed
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**U.S. - RCRA (Resource Conservation & Recovery Act) - D Series Wastes - Max Conc of Contaminants for the Tox Characteristic**

• Ethylene	74-85-1	Not Listed
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**U.S. - RCRA (Resource Conservation & Recovery Act) - F Series Wastes - Wastes from Nonspecific Sources**

• Ethylene	74-85-1	Not Listed
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**U.S. - RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261**

• Ethylene	74-85-1	Not Listed
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**U.S. - RCRA (Resource Conservation & Recovery Act) - K Series Wastes - Wastes from Specified Sources**

• Ethylene	74-85-1	Not Listed
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**U.S. - RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constituents**

• Ethylene	74-85-1	Not Listed
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**U.S. - RCRA (Resource Conservation & Recovery Act) - P Series Wastes - Acutely Toxic Wastes**

• Ethylene	74-85-1	Not Listed
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**U.S. - RCRA (Resource Conservation & Recovery Act) - Part 268 Appendix III - Halogenated Organic Compounds (HOCs)**

• Ethylene	74-85-1	Not Listed
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**U.S. - RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR Rule - Universal Treatment Standards**

• Ethylene	74-85-1	Not Listed
<b>U.S. - RCRA (Resource Conservation &amp; Recovery Act) - TSD Facilities Ground Water Monitoring</b>		
• Ethylene	74-85-1	Not Listed
<b>U.S. - RCRA (Resource Conservation &amp; Recovery Act) - U Series Wastes - Acutely Toxic Wastes &amp; Other Hazardous Characteristics</b>		
• Ethylene	74-85-1	Not Listed
<b>U.S. - RCRA (Resource Conservation &amp; Recovery Act) - Waste Minimization Priority Chemicals</b>		
• Ethylene	74-85-1	Not Listed

## United States - California

### Environment

<b>U.S. - California - Proposition 65 - Carcinogens List</b>		
• Ethylene	74-85-1	Not Listed
<b>U.S. - California - Proposition 65 - Developmental Toxicity</b>		
• Ethylene	74-85-1	Not Listed
<b>U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)</b>		
• Ethylene	74-85-1	Not Listed
<b>U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)</b>		
• Ethylene	74-85-1	Not Listed
<b>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</b>		
• Ethylene	74-85-1	Not Listed
<b>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</b>		
• Ethylene	74-85-1	Not Listed

## United States - Pennsylvania

### Labor

<b>U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List</b>		
• Ethylene	74-85-1	
<b>U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances</b>		
• Ethylene	74-85-1	Not Listed

## 15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

## Section 16 - Other Information

<b>Last Revision Date</b>	• 08/September/2014
<b>Preparation Date</b>	• 08/September/2014
<b>Disclaimer/Statement of Liability</b>	• To the best of Air Liquide's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either express or implied, are provided. The information contained herein relates only to this specific product. If this gas mixture is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.

