

Ethanol 200 Proof Non-Denatured Alcohol

Safety Data Sheet

Pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule
Date of Issue: 04/04/2016

SECTION 1: IDENTIFICATION

1.1. Product Identifier Product Form: Mixture

Product Name: Ethyl Alcohol 200 Proof

1.2. Intended Use of the Product General purpose solvent

1.3. Name, Address, and Telephone of the Responsible Party

Company

High Precision Gas LLC 10770 Painter Avenue Santa Fe Springs, CA 90670

714-868-6525

www.highprecisiongas.com

1.4. Emergency Telephone Number

Emergency Number : Professional Emergency Resource Services (PERS)

(800) 633-8253 24 / 7 / 365

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Flam. Liq. 2 H225 Eye Irrit. 2 H319

Full text of hazard classes and H-statements: see section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)





Signal Word (GHS-US) : Danger

Hazard Statements (GHS-US) : H225 - Highly flammable liquid and vapour.

H319 - Causes serious eye irritation.

Precautionary Statements (GHS-US) : P210 - Keep away from heat, open flames, sparks. - No smoking.

P233 - Keep container tightly closed.

P240 - Ground/bond container and receiving equipment.

P241 - Use explosion-proof electrical, lighting, ventilating equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P264 - Wash hands, forearms, and exposed areas thoroughly after handling.

P280 - Wear eye protection, protective gloves, protective clothing.

 ${\tt P303+P361+P353-IF\ ON\ SKIN\ (OR\ HAIR):\ Take\ off\ immediately\ all\ contaminated}$

clothing. Rinse skin with water/shower.

P303+P361+P353 - IF ON SKIN (OR HAIR): Take off immediately all contaminated

clothing. Rinse with water/shower.

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 medical advice/attention. P370+P378 - In case of fire: Use appropriate media to extinguish.

P403+P235 - Store in a well-ventilated place. Keep cool.

P501 - Dispose of contents/container in accordance with local, regional, national,

territorial, provincial, and international regulations

2.3. Other Hazards

Other Hazards Not Contributing to the Classification: Flammable vapors can accumulate in head space of closed systems.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Name	Synonyms	Product Identifier	%	GHS US classification
Ethyl alcohol		(CAS-No.) 64-17-5	100	Flam. Liq. 2, H225
				Eye Irrit. 2A, H319

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If exposed or concerned, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.

First-aid Measures After Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

First-aid Measures After Ingestion: Rinse mouth. Get medical attention if symptoms occur.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Causes serious eye irritation.

Symptoms/Injuries After Inhalation: Prolonged exposure to liquid may cause a mild irritation.

Symptoms/Injuries After Skin Contact: Repeated or prolonged skin contact may cause dermatitis and defatting.

Symptoms/Injuries After Eye Contact: Causes serious eye irritation. Symptoms may include: Redness, pain, swelling, itching, burning, tearing, and blurred vision.

Symptoms/Injuries After Ingestion: Ingestion will cause narcotic effects including, but not limited to: nausea, vomiting, abdominal pain, dizziness, incoordination, and respiratory depression.

Chronic Symptoms: None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Alcohol-resistant foam, carbon dioxide, dry chemical, water spray, fog.

Unsuitable Extinguishing Media: Do not use a heavy water stream. A heavy water stream may spread burning liquid. Water may be ineffective because it may not cool material below its flash point.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Highly flammable liquid and vapor.

Explosion Hazard: May form flammable/explosive vapor-air mixture. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

Reactivity: Reacts violently with strong oxidizers. Increased risk of fire or explosion.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering environment.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. **Hazardous Combustion Products:** Carbon oxides (CO, CO₂).

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Use special care to avoid static electric charges. Keep away from heat, sparks, open flames, hot surfaces. – No smoking. Avoid all eyes and skin contact and do not breathe vapor and mist.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel. Stop leak if safe to do so.

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6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection. Use appropriate personal protection equipment (PPE). **Emergency Procedures:** Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. **Methods for Cleaning Up:** Absorb and/or contain spill with inert material, then place in suitable container. Do not take up in combustible material such as: saw dust or cellulosic material. Use only non-sparking tools.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Handle empty containers with care because residual vapors are flammable.

Precautions for Safe Handling: Avoid contact with skin, eyes and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist, spray, vapors. Take precautionary measures against static discharge. Use only non-sparking tools.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical, lighting, ventilating equipment.

Storage Conditions: Store in a dry, cool, and well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container closed when not in use. Keep in fireproof place.

Incompatible Materials: Strong oxidizing agents, acids, alkali metals, ammonia, hydrazine, peroxides, sodium, acid anhydrides, calcium hypochlorite, chromyl chloride, nitrosyl perchlorate, bromine pentafluoride, perchloric acid, silver nitrate, mercuric nitrate, potassium-tert-butoxide, magnesium perchlorate, acid chlorides, platinum, uranium hexafluoride, silver oxide, iodine heptafluoride, acetyl bromide, disulfuryl difluoride, tetrachlorosilane + water, acetyl chloride, permanganic acid, ruthenium (VIII) oxide, uranyl perchlorate, potassium dioxide.

7.3. Specific End Use(s) Solvent.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Ethyl Alcoho	Ethyl Alcohol (64-17-5)		
USA ACGIH	ACGIH chemical category	Confirmed Animal Carcinogen with Unknow Relevance to Humans	
USA ACGIH	ACGIH STEL (ppm)	1000 ppm	
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1900 mg/m³	
USA NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm	
USA IDLH	US IDLH (ppm)	3300 ppm	
USA OSHA	OSHA PEL (TWA) (mg/m³)	1900 mg/m³	
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm	

8.2. Exposure Controls

Appropriate Engineering Controls

: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide sufficient ventilation to keep vapors below permissible exposure limit. Gas detectors should be used when flammable gases/vapors may be released. Proper grounding procedures to avoid static electricity should be followed. Ensure all national/local regulations are observed.

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Personal Protective Equipment : Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear

respiratory protection.









Materials for Protective Clothing : Not available

Hand Protection : Wear chemically resistant protective gloves

Eye and Face Protection: Chemical safety goggles or glasses.Skin and Body Protection: Wear chemically protective clothing.

Respiratory Protection : If exposure limits are exceeded or irritation is experienced, approved respiratory

protection should be worn.

Other Information : When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State : Liquid

Appearance : Colorless, clear, volatile liquid

Odor : Alcohol

Odor Threshold : No data available рΗ : No data available **Evaporation Rate** : No data available **Melting Point** : No data available **Freezing Point** : -113.8 °C (-172.84 °F) **Boiling Point** : 78 °C (172.4 °F) : 12.8 °C (55 °F) CC Flash Point **Auto-ignition Temperature** : No data available **Decomposition Temperature** : No data available Flammability (solid, gas) : Not applicable Lower Flammable Limit : 3.3 % for Ethanol

Vapor Pressure : 44.6 mm Hg @ 20°C (68°F)

Relative Vapor Density at 20° C : 1.59 for Ethanol
Relative Density : 0.8157 – 0.814
Specific Gravity : No data available
Solubility : Water: Completely
Partition Coefficient: N-Octanol/Water : No data available
Viscosity : No data available

Explosion Data – Sensitivity to Mechanical Impact : Not expected to present an explosion hazard due to mechanical

mpact.

: 19 % for Ethanol

Explosion Data – Sensitivity to Static Discharge : Static discharge could act as an ignition source.

SECTION 10: STABILITY AND REACTIVITY

Upper Flammable Limit

- 10.1. Reactivity: Reacts violently with strong oxidizers. Increased risk of fire or explosion.
- **10.2. Chemical Stability:** Stable at standard temperature and pressure.
- **10.3.** Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
- **10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.
- **10.5. Incompatible Materials:** Strong oxidizing agents, acids, alkali metals, ammonia, hydrazine, peroxides, sodium, acid anhydrides, calcium hypochlorite, chromyl chloride, nitrosyl perchlorate, bromine pentafluoride, perchloric acid, silver nitrate, mercuric nitrate, potassium-tert-butoxide, magnesium perchlorate, acid chlorides, platinum, uranium hexafluoride, silver oxide, iodine heptafluoride, acetyl bromide, disulfuryl difluoride, tetrachlorosilane + water, acetyl chloride, permanganic acid, ruthenium (VIII) oxide, uranyl perchlorate, potassium dioxide.
- 10.6. Hazardous Decomposition Products: Carbon oxides (CO, CO₂).

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SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity: Not classified LD50 and LC50 Data:

Ethyl Alcohol, 200 Proof (64-17-5)	
LD50 Oral Rat	10470 mg/kg
LD50 Dermal Rat	20 ml/kg
LD50 Inhalation Rat	124.7 mg/I/4h
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not Classified
Carcinogenicity: Not Classified
Reproductive Toxicity: Not Classified

Specific Target Organ Toxicity (Single Exposure): Not classified.

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure to liquid may cause a mild irritation.

Symptoms/Injuries After Skin Contact: Repeated or prolonged skin contact may cause dermatitis and defatting.

Symptoms/Injuries After Eye Contact: Causes serious eye irritation. Symptoms may include: Redness, pain, swelling, itching,

burning, tearing, and blurred vision.

Symptoms/Injuries After Ingestion: Ingestion will cause narcotic effects including, but not limited to: nausea, vomiting,

abdominal pain, dizziness, incoordination, and respiratory depression. **Chronic Symptoms:** None expected under normal conditions of use.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General : Readily bioldegrades. Evaporates to moderate extent. Does not bioaccumulate

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Ethyl alcohol (64-17-5)	
LC50 Fish 1	12.0 - 16.0 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	9268 - 14221 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	> 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

12.2. Persistence and Degradability

Ethyl Alcohol (64-17-5)	
Persistence and Degradability	Not established. May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

Ethyl Alcohol (64-17-5)	
Bioaccumulative Potential	Not established.
Log Pow	-0.32

12.4. Mobility in Soil No additional information available

12.5. Other Adverse Effects

Other Information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: Handle empty containers with care because residual vapors are flammable.

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

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In Accordance with DOT

Proper Shipping Name : ETHYL ALCOHOL SOLUTIONS

Hazard Class : 3 **Identification Number** : UN1170 **Label Codes** : 3

Packing Group : 11

Marine Pollutant : Marine pollutant

ERG Number : 127 In Accordance with IMDG 14.2.

: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) **Proper Shipping Name**

Hazard Class Identification Number : UN1170 **Packing Group** : 11 **Label Codes** : 3 EmS-No. (Fire) : F-E EmS-No. (Spillage) : S-D

Marine Pollutant : Marine pollutant



Proper Shipping Name : ETHYL ALCOHOL SOLUTION

Packing Group : 11 **Identification Number** : UN1170 **Hazard Class** : 3 **Label Codes** : 3 ERG Code (IATA) : 3L



SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Ethyl Alcohol, 200 Proof (64-17-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Fire Hazard
	Immediate (acute) health hazard
Ethyl alcohol (64-17-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

15.2. **US State Regulations**

Ethyl alcohol (64-17-5)	
	U.S Massachusetts - Right To Know List
	U.S New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

Ethyl Alcohol (64-17-5)	
U.S California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of
	California to cause cancer. Ethyl Alcohol is included on the Proposition
	65 list when it is used in alcoholic beverages.
U.S California - Proposition 65 - Developmental	WARNING: This product contains chemicals known to the State of
Toxicity	California to cause birth defects. Ethyl Alcohol is included on the
	Proposition 65 list when it is used in alcoholic beverages.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 04/04/2016

Other Information : This document has been prepared in accordance with the SDS

requirements of the OSHA Hazard Communication Standard 29 CFR

1910.1200

GHS Full Text Phrases:

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2

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H225	Highly flammable liquid and vapor
H319	Causes serious eye irritation

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)

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