

# Ethyl Alcohol 200 Proof Ultra Pure, LLC Safety Data Sheet

ultrapure

Revision date: 4 March 2019  
Print date: 4 March 2019  
Version: Rev 1

## 1. Product and Company Identification

### 1.1 Product identifiers

Product Name Ethyl Alcohol 200 Proof All Grades (Synthetic/Kosher)  
Producer Ultra Pure, LLC  
Product Number No data available  
CAS-No. Mixture

### 1.2 Identified uses of the product and uses advised against

Identified Uses Solvent

### 1.3 Details of the chemical supplier

Company Ultra Pure, LLC  
Address 50 Old Kings Highway N.  
Darien, CT 06820  
USA  
Telephone: (1)-203-662-9761

### 1.4 Emergency phone number

Emergency phone number 1-800-424-9300

## 2. Hazards Identification

### 2.1 Classification of the substance or mixture

GHS Class Flammable liquid, Category 2  
Eye Irritation, Category 2A

#### Classification according to Regulation (EC) No 1272/2008

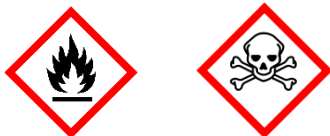
Based on present data no classification and labeling is required according to Directive 1272/2008/EC and its amendments (CLP Regulation, GHS).

#### Classification according to Directive 67/548/EEC or Directive 1999/45/EC

According to present data no classification and labeling is required according to Directives 67/548/EEC or 1999/45/EC.

### 2.2 GHS Label elements, including precautionary statements

GHS Pictograms



Signal word Danger

Hazard statements  
H225 – Highly flammable liquid and vapor  
H318 – Causes serious eye damage

Precautionary statements  
P210 – Keep away from heat/sparks/open flames/hot surfaces – No smoking  
P240 – Ground/bond container and receiving equipment  
P241 – Use explosion-proof electrical/ventilating/light equipment.  
P242 – Use only non-sparking tools  
P243 – Take precautionary measures against static discharge  
P264 – Wash with soap and water thoroughly after handling  
P280 – Wear protective gloves/protective clothing/eye protection/face protection.  
P303 + P361 + P353 – If on skin: Take off immediately all contaminated clothing. Rinse skin 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 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 to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - None

**3. Composition/Information on Ingredients**

3.1 Product mixture

|              |                            |
|--------------|----------------------------|
| Synonyms     | Solvent                    |
| Formula      | No data available; mixture |
| Molecular wt | Mixture                    |
| CAS-No.      | Mixture                    |
| EC-No.       | Mixture                    |

| Chemical Name | CAS-No.   | EC-No.    | Ingredient Percent |
|---------------|-----------|-----------|--------------------|
| Ethanol       | 64-17-5   | 200-578-6 | 95.1-96.9%         |
| Water         | 7732-18-5 | 231-791-2 | 3.1-4.9%           |

Remarks: There are no additional hazardous ingredients greater than or equal to 1.0 wt% concentration or carcinogenic ingredients greater than or equal to 0.1 wt% concentration.

**4. First Aid Measures**

4.1 Description of first aid measures

|                |  |
|----------------|--|
| General advice | First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists, refer to Section 8 for specific personal protective equipment.  |
| Skin contact   | If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.   |
| Eye contact    | If this product enters the eyes, check for and remove any contact lenses. Open eyes while under gently running water. Use sufficient force to open eyelids. "Roll" eyes to expose more surface. Minimum flushing is for 15 minutes. Seek immediate medical attention.  |
| Inhalation     | After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR). Seek immediate medical attention.   |
| Ingestion      | Do not induce vomiting. GET MEDICAL ATTENTION IMMEDIATELY. If person is fully conscious give 1 cup or 8 ounces of water. If medical advice is delayed and if an adult has swallowed several ounces of chemical, then give 3-4 ounces (1/3-1/2 cup) (90-120 ml) of hard liquor such as 80 proof whiskey. For children, give proportionally less liquor at a dose of 0.3 ounce (1 1/2 tsp) (8 ml) liquor for each 10 pounds of body weight, or 2 ml per kg body weight (for example: 1.2 ounce (2 1/3 tablespoon) for a 40 pound child or 36 ml for an 18 kg child). |

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects: The most important known symptoms and effects are described in the labelling (see section 2.2) and in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

Other first aid: In cases where several ounces (60 - 100 ml) have been ingested, consider the use of ethanol and hemodialysis in the treatment. Consult standard literature for details of treatment. If ethanol is used, a therapeutically effective blood concentration in the range of 100 - 150 mg/dl may be achieved by a rapid loading dose followed by a continuous intravenous infusion. Consult standard literature for details of treatment. 4-Methyl pyrazole (Antizol TM) is an effective blocker of alcohol dehydrogenase and should be used in the treatment of ethylene glycol, di- or triethylene glycol, ethylene glycol butyl ether, or methanol intoxication if available. Fomepizol protocol (Brent, J. et al, New England Journal of Medicine, Feb 8, 1901, 344:6, p. 424-9): loading dose 15 mg/kg intravenously, follow by bolus dose of 10 mg/kg every 12 hours; after 48 hours, increase bolus dose

to 15 mg/kg every 12 hours. Continue fomepizol until serum methanol, EG, DEG, or TEG are undetectable. The signs and symptoms of poisoning include anion gap metabolic acidosis, CNS depression, renal tubular injury, and possible late stage cranial nerve involvement. Respiratory symptoms, including pulmonary edema, may be delayed.

Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. Maintain adequate ventilation and oxygenation of the patient. In severe poisoning, respiratory support with mechanical ventilation and positive end expiratory pressure may be required. Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighted against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

## 5. Fire Fighting Measures

### 5.1 Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media** Use dry powder, alcohol-resistant foam, water in large amounts, carbon dioxide. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

**Special hazards** Isolate from oxidizers, heat, sparks, electrical equipment and open flame. Closed containers may explode if exposed to extreme heat. Applying to hot surfaces requires special precautions. Empty container very hazardous! Continue all label precautions.

### 5.3 Advice for firefighters

**Protective equipment** Water spray may be ineffective on fire but can protect fire-fighters and cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. Wear self-contained breathing apparatus for firefighting if necessary.

## 6. Accidental Release Measures

### 6.1 Personal precautions, protective equipment, and emergency procedures

**Personal precautions** The proper personal protective equipment for incidental releases (such as: 1 Liter of the product released in a well-ventilated area), use impermeable gloves, they should be Level B: **triple-gloves (rubber gloves and nitrile gloves over latex gloves), chemical resistant suit and boots, hard-hat, and Self-Contained Breathing Apparatus** specific for the material handled, goggles, face shield, and appropriate body protection. In the event of a large release, use impermeable gloves, specific for the material handled, chemically resistant suit and boots, and hard hat, and Self-Contained Breathing Apparatus or respirator. Personal protective equipment are required wherever engineering controls are not adequate or conditions for potential exposure exist. Select NIOSH/MSHA approved based on actual or potential airborne concentrations in accordance with latest OSHA and/or ANSI recommendations. For personal protection see section 8.

### 6.2 Environmental precautions

**Environmental precautions** Stop spill at source. Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Close or cap valves and/or block or plug hole in leaking container and transfer to another container. Keep from entering storm sewers and ditches which lead to waterways, and if necessary, call the local fire or police department for immediate emergency assistance.

### 6.3 Methods and materials for containment and cleaning up

**Methods for cleanup** Absorb spilled liquid with polypads or other suitable absorbent materials. If necessary, neutralize using suitable buffering material, (acid with soda ash or base with phosphoric acid), and test area with litmus paper to confirm neutralization. Clean up with non-combustible absorbent (such as: sand, soil, and so on). Shovel up and place all spill residue in suitable containers. dispose of at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal (see Section 13 - Disposal Considerations).

### 6.4 References to other sections

**Other references** For disposal see section 13.

## 7. Handling and Storage

### 7.1 General hygiene considerations

**General hygiene** Avoid contact with skin and eyes. In case of large quantities of vapor or mist, use local exhaust or general dilution ventilation to control exposure within applicable limits. For precautions see section 2.2.

**7.2 Precautions for safe handling**

Safe handling precautions Isolate from oxidizers, heat, sparks, electric equipment & open flame. Use explosion-proof equipment. Use only with adequate ventilation. Avoid breathing of vapor or spray mist. Avoid contact with skin & eyes. Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse. Avoid free fall of liquid. Ground containers when transferring. Do not flame cut, saw, drill, braze, or weld. Empty container very hazardous! Continue all label precautions! Keep container tightly closed in a dry and well-ventilated place.

**7.3 Conditions for safe storage, including any incompatibilities**

Other storage conditions Keep in fireproof surroundings. Keep separated from strong oxidants. Keep cool. Do not store above 49 C/128 F. Keep container tightly closed & upright when not in use to prevent leakage.

**8. Exposure Controls/Personal Protection**

**8.1 Control and exposure limits recommended by the chemical manufacturer**

| MATERIAL | CAS-No. | EC-No.    | TWA (OSHA) | TLVA (ACGIH) |
|----------|---------|-----------|------------|--------------|
| Ethanol  | 64-17-5 | 288-578-6 | 1000 ppm   | 1000 ppm A4  |

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 8.1%.

**8.2 Appropriate engineering controls**

Engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Use adequate ventilation where dust forms to keep concentration under exposure control limits.

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

Respiratory protection None required for consumer use. For manufacturing quantities: where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye/face protection None required for consumer use. For manufacturing quantities: safety glasses with side-shields conforming to EN166 are recommended. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Hand protection None required for consumer use. For manufacturing quantities: handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection None required for consumer use. For manufacturing quantities: wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**9. Physical and Chemical Properties**

**9.1 Information on basic physical and chemical properties**

- a) Appearance Liquid, colorless
- b) Odor Alcohol
- c) Odor threshold No data available
- d) pH No data available
- e) Melting/freezing point -113.8°C (237°F)
- f) Boiling point 78°C (174°F)
- g) Flash point 12.8°C (55°F)
- h) Evaporation rate No data available
- i) Flammability (solid, gas) No data available
- j) Upper/lower flammability or explosive limits Upper (UEL): 19%  
Lower (LEL): 3.3%
- k) Vapor pressure 44.6 mm of Hg @ 20°C

## Ultra Pure LLC Ethyl Alcohol 200 Proof (All grades) SDS

|  |                   |
|--|-------------------|
| l) Vapor density                       | 1.59              |
| m) Relative density                    | 0.8157-8014       |
| n) Water solubility                    | Complete          |
| o) Partition coefficient octanol/water | No data available |
| p) Auto-ignition temp                  | No data available |
| q) Decomposition temp                  | No data available |
| r) Viscosity                           | No data available |

## 10. Stability and Reactivity

### 10.1 Reactivity

|            |                   |
|------------|-------------------|
| Reactivity | No data available |
|------------|-------------------|

### 10.2 Chemical stability

|                    |   |
|--------------------|---|
| Chemical stability | Stable under ordinary conditions of use and storage. Hygroscopic. |
|--------------------|---|

### 10.3 Possibility of hazardous reactions

|                     |  |
|---------------------|--|
| Hazardous reactions | Isolate from oxidizers, heat, sparks, electric equipment & open flame. |
|---------------------|--|

### 10.4 Conditions to avoid

|                     |  |
|---------------------|--|
| Conditions to avoid | Contact with incompatible chemicals and exposure to extremely high temperatures. |
|---------------------|--|

### 10.5 Incompatible materials

|                        |   |
|------------------------|---|
| Incompatible materials | Reacts with strong oxidants, causing fire & explosion hazard. |
|------------------------|---|

### 10.6 Hazardous decomposition products

|                    |  |
|--------------------|--|
| Hazardous products | Carbon Monoxide, Carbon Dioxide from burning. In the event of fire, see section 5. |
|--------------------|--|

## 11. Toxicological Information

### 11.1 Information on toxicological effects

#### Acute toxicity

|                           |                        |
|---------------------------|------------------------|
| Acute oral toxicity       | LD50 Rat 10470 mg/kg   |
| Acute dermal toxicity     | LD50 Rat 20 ml/kg      |
| Acute inhalation toxicity | LC50 Rat 124.7 mg/l/4h |

#### Skin corrosion/irritation

|                           |                |
|---------------------------|----------------|
| Skin corrosion irritation | Not classified |
|---------------------------|----------------|

#### Serious eye damage/eye irritation

|                           |                               |
|---------------------------|-------------------------------|
| Eye damage/eye irritation | Causes serious eye irritation |
|---------------------------|-------------------------------|

#### Respiratory or skin sensitization

|                        |                   |
|------------------------|-------------------|
| Respiratory sensitizer | No data available |
| Skin sensitizer        | No data available |

#### Germ cell mutagenicity

|              |                   |
|--------------|-------------------|
| Mutagenicity | No data available |
|--------------|-------------------|

#### Suspected cancer agent

|       |   |
|-------|---|
| ACGIH | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen. |
| NTP   | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen. |
| OSHA  | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen. |
| IARC  | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen. |

#### Reproductive toxicity

|                       |   |
|-----------------------|---|
| Reproductive toxicity | This product is not reported to produce mutagenic, embryotoxic, teratogenic, or reproductive effects in humans. |
|-----------------------|---|

#### Aspiration hazard

|                   |                   |
|-------------------|-------------------|
| Aspiration hazard | No data available |
|-------------------|-------------------|

## 12. Ecological Information

### 12.1 Ecotoxicity (aquatic and terrestrial)

|             |  |
|-------------|--|
| Ecotoxicity | LC50 Fish 1 – 12.0-16.0ml/l 96h Oncorhynchus mykiss<br>EC50 Daphnia 1 – 9268 – 14221 mg/l 48 h Daphnia magna<br>LC 50 Fish 2 - >100 mg/l 96h Pimephales promelas |
|-------------|--|

### 12.2 Persistence and degradability

|               |   |
|---------------|---|
| Degradability | Not established. May cause long-term adverse effects in the environment |
|---------------|---|

### 12.3 Bioaccumulation potential

|                 |                 |
|-----------------|-----------------|
| Bioaccumulation | Log Pow - -0.32 |
|-----------------|-----------------|

### 12.4 Mobility in soil

|                  |                   |
|------------------|-------------------|
| Mobility in soil | No data available |
|------------------|-------------------|

### 12.5 Results of PBT and vPvB assessment

|                     |   |
|---------------------|---|
| PBT/vPvB assessment | Not available as chemical safety assessment not required/not conducted. |
|---------------------|---|

## 13. Disposal Considerations

### 13.1 Waste treatment methods

|                          |  |
|--------------------------|--|
| Waste treatment disposal | Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority |
|--------------------------|--|

## 14. Transport Information

### DOT

UN number: 1170 Class: 3 Packing group: II

Proper shipping name: Alcohols

Reportable Quantity (RQ):

Poison Inhalation Hazard: No

### TDG

UN number: 1170 Class: 3 Packing group: II EMS-No: F-E, S-D Proper shipping name: ETHANOL/METHANOL

### IMDG

UN number: 1170 Class: 3 Packing group: II EMS-No: F-E, S-D Proper shipping name: ETHANOL/METHANOL

### IATA

UN number: 1170 Class: 3 Packing group: II EMS-No: F-E, S-D Proper shipping name: ETHANOL/METHANOL

## 15. Regulatory Information

### 15.1 Safety, health, and environmental regulations specific to the product or mixture

|                        |   |
|------------------------|---|
| SARA 302 Components    | No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.   |
| SARA 311/312 Hazards   | Acute Health, Fire  |
| SARA 313 Components    | This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. |
| TSCA                   | All components of this product are on the TSCA list.  |
| EINECS                 | No components of this product are on the European Inventory of Existing Commercial Chemical Substances.   |
| Canada DSL             | All components of this product are on the Canada Domestic Substance List.   |
| CA Prop. 65 Components | This product contains chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.  |

## 16. Other Information

|             |   |
|-------------|---|
| HMIS Rating | Health hazard: 2<br>Flammability: 4<br>Physical Hazard: 0 |
| NFPA Rating | Health hazard: 2<br>Fire Hazard: 4                        |

## Ultra Pure LLC Ethyl Alcohol 200 Proof (All grades) SDS

Reactivity Hazard: 0

Revision Date

4 March 2019

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Ultra Pure, LLC assumes no responsibility for injury to the vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, Ultra Pure, LLC assumes no responsibility for injury to vendee or third persons proximately caused by use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.

### Abbreviations and acronyms

IMDG - International Maritime Code for Dangerous Goods  
TDG - Transportation of Dangerous Goods  
IATA - International Air Transport Association  
GHS - Globally Harmonized System of Classification and Labelling of Chemicals  
PBT - Persistent, bioaccumulative and toxic assessment  
vPvB - Very persistent and very bioaccumulative assessment  
ACGIH - American Conference of Governmental Industrial Hygienists  
NIOSH - National Institute for Occupational Safety and Health  
TLV - Threshold Limit Values  
CAS - Chemical Abstracts Service (division of the American Chemical Society)  
NFPA - National Fire Protection Association  
HMIS - Hazardous Materials Identification System  
CFR - Code of Federal Regulations  
SARA - Superfund Amendments and Reauthorization Act  
DOT - US Department of Transportation  
EC50 - Half maximal effective concentration  
LD50 - Median lethal dose  
LC50 - Median lethal concentration  
SDS - Safety Data Sheet