# Ethyl Alcohol 192 Proof Ultra Pure, LLC Safety Data Sheet



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Version: Rev 2

# 1. Product and Company Identification

#### 1.1 Product identifiers

Product Name Ethyl Alcohol 192 Proof All Grades (USP/ACS/Grain/Synthetic/Kosher/Organic)

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 gearWear 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, hardhat, 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 airpurifying 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

Body protection

a)

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.

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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

**Appearance** 

# 9.1 Information on basic physical and chemical properties

Liquid, colorless

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

# Ultra Pure LLC Ethyl Alcohol 192 Proof (All grades) SDS

I) 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
 q) Decomposition temp
 r) Viscosity
 No data available
 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

Acute dermal toxicity

Acute inhalation toxicity

LD50 Rat 10470 mg/kg

LD50 Rat 20 ml/kg

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

EC50 Daphnia 1 - 9268 - 14221 mg/l 48 h Daphnia magna

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

Flammability: 4 Physical Hazard: 0

NFPA Rating Health hazard: 2

Fire Hazard: 4

Reactivity Hazard:0

#### Revision Date

5 January 2021

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