

Ethanol SDA 3C 190 Proof Ultra Pure, LLC Safety Data Sheet

ultrapure

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1. Product and Company Identification

1.1 Product identifiers

Product Name	Ethanol SDA 3C 190 Proof
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
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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
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2. Hazards Identification

2.1 Classification of the substance or mixture

GHS Class	Flammable liquid, Category 2 Eye Irritation, Category 2A Acute toxicity, Oral Category 3 Acute toxicity, Inhalation Category 3 Acute toxicity, Dermal Category 3 Specific target organ toxicity – single exposure Category 1
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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
H304 – May be fatal if swallowed and enters airways
H315 – Causes skin irritation.
H319 – Causes serious eye irritation
H335 – May cause respiratory irritation
H336 – May cause drowsiness or dizziness

Precautionary statements

H402 – Harmful to aquatic life

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

P271 – Use only outdoors or in a well-ventilated area

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P310 – If swallowed: Immediately call a poison center or doctor/physician.

P302 + P352 – If on skin: Gently wash with soap and water.

P304 + P340 – If inhaled: Remove victim to fresh air & keep at rest in a position comfortable for breathing.

P305 + P351 + P338 – If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

P331 – Do not induce vomiting.

P332 + P313 – If skin irritation occurs: get medical advice/attention.

P337 + P313 – If eye irritation occurs” get medical advice/attention.

P361 – Remove/Take off immediately all contaminated clothing.

P363 – Wash contaminated clothing before reuse.

P405 – Store locked up.

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	80-90 %
Water	7732-18-5	231-791-2	0-10%
Isopropanol	67-63-0	200-661-7	0-5%

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
Water	7732-18-5	231-791-2	None Known	None Known
Isopropanol	67-63-0	200-661-7	400 ppm	200 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, Water-White
b) Odor	Alcohol
c) Odor threshold	No data available
d) pH	No data available
e) Melting/freezing point	No data available
f) Boiling point	75-100°C (167-212°F)
g) Flash point	4°C (40°F)
h) Evaporation rate	1.0
i) Flammability (solid, gas)	Class I B
j) Upper/lower flammability or explosive limits	Upper (UEL): No data available Lower (LEL): 2.0
k) Vapor pressure	39.2 mm of Hg @ 20°C
l) Vapor density	1.4
m) Relative density	0.805
n) Water solubility	Complete
o) Partition coefficient octanol/water	No data available
p) Auto-ignition temp	398°C (750°F)
q) Decomposition temp	No data available
r) Viscosity	No data available

10. Stability and Reactivity

10.1 Reactivity

Reactivity	No data available
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10.2 Chemical stability

Chemical stability	Stable under ordinary conditions of use and storage. Hygroscopic.
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10.3 Possibility of hazardous reactions

Hazardous reactions	Isolate from oxidizers, heat, sparks, electric equipment & open flame.
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10.4 Conditions to avoid

Conditions to avoid	Contact with incompatible chemicals and exposure to extremely high temperatures.
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10.5 Incompatible materials

Incompatible materials	Reacts with strong oxidants, causing fire & explosion hazard.
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10.6 Hazardous decomposition products

Hazardous products	Carbon Monoxide, Carbon Dioxide from burning. In the event of fire, see section 5.
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11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity Can be fatal or cause blindness if swallowed. Cannot be made non-poisonous. **POISON!** Can cause irreversible nervous system damage & death. Harmful or fatal if swallowed. Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea.

Acute dermal toxicity Primary irritation to skin, defatting, dermatitis. Primary irritation to eyes, redness, tearing, blurred vision. Liquid can cause eye irritation. Wash thoroughly after handling.

Acute inhalation toxicity Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression. Vapor harmful. Breathing vapor can cause irritation. Acute overexposure can cause harm to affected organs by routes of entry.

Skin corrosion/irritation

Skin corrosion irritation Primary irritation to skin, defatting, dermatitis. Primary irritation to eyes, redness, tearing, blurred vision. Liquid can cause eye irritation. Wash thoroughly after handling.

Serious eye damage/eye irritation

Eye damage/eye irritation Primary irritation to skin, defatting, dermatitis. Primary irritation to eyes, redness, tearing, blurred vision. Liquid can cause eye irritation. Wash thoroughly after handling.

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 This product may be harmful or fatal to plant and animal life if released into the environment. Refer to Section 11 (Toxicological Information) for further data on the effects of this product's components on test animals.

12.2 Persistence and degradability

Degradability This product is completely biodegradable.

12.3 Bioaccumulation potential

Bioaccumulation This product does not accumulate or biomagnify in the environment.

12.4 Mobility in soil

Mobility in soil This material is mobile liquid.

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: 1987 Class: 3 Packing group: II

Proper shipping name: Alcohols

Reportable Quantity (RQ):

Poison Inhalation Hazard: No

TDG

UN number: 1987 Class: 3 Packing group: II EMS-No: F-E, S-D Proper shipping name: Alcohols

IMDG

UN number: 1987 Class: 3 Packing group: II EMS-No: F-E, S-D Proper shipping name: Alcohols

IATA

UN number: 1987 Class: 3 Packing group: II EMS-No: F-E, S-D Proper shipping name: Alcohols

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: Methanol

16. Other Information

HMIS Rating	Health hazard: 2 Flammability: 3 Physical Hazard: 0
NFPA Rating	Health hazard: 1 Fire Hazard: 3 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	<p>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</p>
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