

## Ethanol SDA 3A 190 Proof

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**SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**


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<b>Trade name</b>	Ethanol SDA 3A 190 Proof		
<b>Synonyms</b>	Denatured Alcohol		
<b>Use</b>	Industrial & Institutional cleaning, Industrial use, Intermediate, Paint and Coatings, Pharmaceutical, Process/Extraction Solvent, Raw material for chemical processes, Raw material for cosmetic products, Raw material for industry, Raw material for pharmaceuticals, Solvent		
<b>Company</b>	Sasol Chemicals (USA) LLC (an affiliate of Sasol Chemicals North America LLC)		
<b>Address</b>	900 Threadneedle Ste 100 Houston TX 77079		
<b>Telephone</b>	CHEMTREC North America Transportation Emergency (24-hr)		(800) 424-9300
	CHEMTREC World Wide		(703) 527-3887
	Other Emergencies (24-hr)		(337) 494-5142
	MSDS and Product Information (8:00am-4:30pm CST)		(281) 588-3491
	Health and Safety Information (7:30am-4:00pm CST)		(281) 588-3492
<b>E-mail address</b>	SasolElectronicSDS@us.sasol.com		

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**SECTION 2 HAZARDS IDENTIFICATION**


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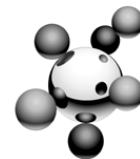
**GHS Hazards**

Flammable liquids	Category 2
Eye irritation	Category 2A
Acute toxicity (Oral)	Category 4
Acute toxicity (Inhalation)	Category 4
Acute toxicity (Dermal)	Category 4

**LABEL ELEMENTS****Hazard symbols****Signal word** Danger

<b>Hazard statements</b>	H225 Highly flammable liquid and vapour.
	H319 Causes serious eye irritation.
	H302 Harmful if swallowed.
	H312 Harmful in contact with skin.
	H332 Harmful if inhaled.

**Precautionary statements**



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**Prevention**

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P280 Wear protective gloves/ eye protection/ face protection.
- P264 Wash skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
- P271 Use only outdoors or in a well-ventilated area.

**Response**

- P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
- P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide for extinction.
- 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.
- P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
- P330 Rinse mouth.
- P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P312 Call a POISON CENTER or doctor/ physician if you feel unwell.
- P362 Take off contaminated clothing and wash before reuse.

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

**Disposal** P501 Dispose of contents/ container to an approved waste disposal plant.

### SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

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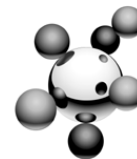
<u>Components</u>	<u>CAS-No.</u>	<u>Weight percent</u>
Ethanol	64-17-5	95
Methanol	67-56-1	5

See Section 8 for Exposure Guidelines and Section 15 for Regulatory Classifications.

### SECTION 4 FIRST AID MEASURES

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**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.



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- Skin contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. When symptoms persist or in all cases of doubt seek medical advice. Wash contaminated clothing before re-use.
- Inhalation** Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. In case of shortness of breath, give oxygen. Call a physician immediately.
- Ingestion** If swallowed, call a poison control centre or doctor immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

## SECTION 5 FIREFIGHTING MEASURES

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### FLAMMABLE PROPERTIES

**Fire/explosion** Flash back possible over considerable distance. NFPA Class IB flammable liquid.

**Suitable extinguishing media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Protective equipment and precautions for firefighters** Wear self-contained breathing apparatus and protective suit. Keep containers and surroundings cool with water spray.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

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**Methods and materials for containment and cleaning up** Evacuate personnel to safe areas. Remove all sources of ignition. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Do not flush into surface water or sanitary sewer system.

**Spill precautions** Material can create slippery conditions.

## SECTION 7 HANDLING AND STORAGE

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**Safe handling advice** Ensure all equipment is electrically grounded before beginning transfer operations. Keep away from heat and sources of ignition.

**Storage/Transport temperature** Ambient

**Load/Unload temperature** Ambient

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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### ENGINEERING MEASURES

Ensure adequate ventilation, especially in confined areas.

### PERSONAL PROTECTIVE EQUIPMENT

**Eyes** Chemical resistant goggles must be worn., Face-shield

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**Skin** Wear suitable protective clothing, gloves and eye/face protection.

**Inhalation** Respiratory protection is normally not required except in emergencies or when conditions cause excessive airborne levels of mists or vapors. Use NIOSH approved respiratory protection.

### EXPOSURE GUIDELINES

<u>Components</u>	<u>Exposure limit(s)</u>
<b>Ethanol</b>	ACGIH STEL 1,000 ppm OSHA PEL 1,000 ppm 1,900 mg/m <sup>3</sup>
<b>Methanol</b>	OSHA PEL 200 ppm 260 mg/m <sup>3</sup> ACGIH TLV (8-hour) 200 ppm ACGIH STEL 250 ppm

PEL= Permissible Exposure Limits  
TLV= Threshold Limit Value  
EL= Excursion Limit

TWA= Time Weighted Average (8 hr.)  
STEL= Short Term Exposure Limit (15 min.)  
WEEL= Workplace Environmental Exposure Level

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

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**Appearance** liquid;

**Colour** Clear, colorless

**Form** liquid

**Odour** alcohol-like

**Odour Threshold** no data available

**Flash point** 17 °C, 63 °F;

**Flammability** Upper explosion limit: 20.0 %(V)  
Lower explosion limit: 4 %(V)

**Boiling point/boiling range** 78 °C, 173 °F;

**Melting point/range** -114 °C, -173 °F;

**Auto-ignition temperature** ca. 400 °C, 752 °F; ASTM D 2155;

**Decomposition temperature** no data available

**Flammability (solid, gas)** no data available

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<b>Vapour pressure</b>	ca. 66.661 hPa @ 20 °C, 68 °F;
<b>Vapour density</b>	no data available
<b>Density</b>	0.81 g/cm <sup>3</sup> @ 15.5 °C, 60 °F;
<b>Specific gravity</b>	no data available
<b>Water solubility</b>	miscible
<b>Viscosity</b>	no data available
<b>pH</b>	no data available
<b>Evaporation rate</b>	no data available
<b>Partition coefficient: n-octanol/water</b>	no data available

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### SECTION 10 STABILITY AND REACTIVITY

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<b>Reactivity</b>	Stable at normal ambient temperature and pressure.
<b>Chemical stability</b>	No decomposition if stored and applied as directed.
<b>Conditions to avoid</b>	Keep away from heat and sources of ignition.
<b>Hazardous decomposition products</b>	Combustion products include carbon dioxide, carbon monoxide and possibly other unidentified organic compounds.
<b>Materials to avoid</b>	Can react with strong oxidizers, inorganic acids, and halogens.
<b>Hazardous polymerisation</b>	None.

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### SECTION 11 TOXICOLOGICAL INFORMATION

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<b>Acute dermal toxicity</b>	LD50 rabbit: > 2,000 mg/kg; OECD Test Guideline 402 Test substance: Ethanol; (literature value)
	LD50 rabbit: > 200 - 1,000 mg/kg Test substance: Methanol
<b>Acute inhalation toxicity</b>	LC50 mouse (4 hours): > 20 mg/l Test substance: Ethanol; (literature value)
	LC50 rat: > 2 - 10 mg/l Test substance: Methanol
<b>Acute oral toxicity</b>	LD50 rat: 2,000 mg/kg; OECD Test Guideline 401 Test substance: Ethanol; (literature value)

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LD50 rat: > 50 - 300 mg/kg  
Test substance: Methanol

**Skin corrosion/irritation** (rabbit): OECD Test Guideline 404  
Test substance: Ethanol  
Not irritating, (literature value)

Test substance: Methanol  
irritating

**Eye damage/irritation** (rabbit): OECD Test Guideline 405  
Test substance: Ethanol  
irritating, (literature value)

**Respiratory or skin sensitization** guinea pig: not sensitizing; Maximisation Test  
(literature value)

**Germ cell mutagenicity** **Genotoxicity in vitro:**  
Type: Ames test; OECD Test Guideline 471  
System: Salmonella typhimurium; with and without metabolic activation  
Result: In vitro tests did not show mutagenic effects.  
Test substance: Ethanol  
(literature value)

**Genotoxicity in vivo:**  
no data available

**Assessment Mutagenicity:**  
Based on available data, the classification criteria are not met.

**Reproductive toxicity** **Reproductive toxicity:**  
no data available

**Assessment Reproductive toxicity:**  
no data available

**Teratogenicity:**  
no data available

**Assessment teratogenicity:**  
no data available

**STOT - single exposure** no data available

**STOT - repeated exposure** rat; Oral; 90-day;  
NOAEL: 1,730 mg/kg  
LOAEL: 3,160 mg/kg  
Test substance: Ethanol  
Based on available data, the classification criteria are not met.

**Aspiration toxicity** no data available

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**Carcinogenicity** **Assessment carcinogenicity:**  
Contains no ingredient listed as a carcinogen

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### SECTION 12 ECOLOGICAL INFORMATION

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**Toxicity to fish** LC50 (Pimephales promelas (fathead minnow)) 96 hours: > 100 mg/l; flow-through test  
Test substance: Ethanol  
(literature value)

LC50 (Pimephales promelas (fathead minnow)) 96 hours: 29,400 mg/l  
Test substance: Methanol

**Toxicity to aquatic invertebrates** EC50 (Ceriodaphnia Dubia (water flea)) 48 hours: > 100 mg/l; static test  
Test substance: Ethanol  
(literature value)

**Toxicity to algae** EC50 (Chlorella vulgaris) 72 hours: > 100 mg/l; static test; OECD Test Guideline 201  
Test substance: Ethanol  
(literature value)

**Chronic toxicity to aquatic invertebrates** NOEC (Ceriodaphnia Dubia (water flea)) 10 d: 9.6 mg/l; semi-static test  
Test substance: Ethanol  
(literature value)

**Biodegradation** Readily biodegradable.

OECD Test Guideline 301B (28 d): > 60 %  
Test substance: Ethanol  
(literature value)

**Bioaccumulation** Test substance: Ethanol  
No bioaccumulation is to be expected (log Pow <= 4).

**Mobility in soil** no data available

**Other adverse effects** no data available

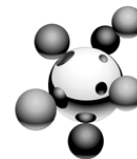
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### SECTION 13 DISPOSAL CONSIDERATIONS

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**Waste Code** D001 - Ignitability (RQ 100 LB). This product has the RCRA characteristic of ignitability. Re-evaluation of the product may be required by the user at the time of disposal, since the product uses, transformations, mixtures, contamination, and spillage may change the classification.

**Disposal methods** Dispose of only in accordance with local, state, and federal regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.



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**Empty containers.** Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, triple-rinsed, properly bunged and promptly returned to a drum reconditioner, or properly disposed.

**SECTION 14 TRANSPORT INFORMATION**

- DOT** UN 1987, Alcohols, n.o.s.(Ethyl alcohol, methanol), 3, II  
(RQ Methanol) When shipped in quantities greater than 100,000 lbs, RQ must be added to the shipping description.
- IATA** UN 1987, Alcohols, n.o.s.(Ethyl alcohol, methanol), 3, II  
(RQ Methanol) When shipped in quantities greater than 100,000 lbs, RQ must be added to the shipping description.
- IMDG** UN 1987, Alcohols, n.o.s., (Ethyl alcohol, methanol), 3, II  
(RQ Methanol) When shipped in quantities greater than 100,000 lbs, RQ must be added to the shipping description.

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

Remarks no data available

**SECTION 15 REGULATORY INFORMATION****U.S. FEDERAL REGULATIONS****OSHA Hazards (HCS 1994)**

Flammable liquid, Eye irritation, Skin irritation

**TSCA Inventory Listing****Components**

Ethanol

Methanol

**CAS-No.**

64-17-5

67-56-1

**SARA 302 Status****Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**CAS-No.****Weight percent****SARA 311/312 Classification**

"Fire hazard", "Immediate (acute) health hazard"

**SARA 313 Chemical****Components**

Methanol

**CAS-No.**

67-56-1

**Weight percent**

5 %

**US. EPA CERCLA Hazardous Substances (40 CFR 302)**



## Ethanol SDA 3A 190 Proof

Components

Methanol

Reportable Quantity

5,000 LB

Weight percent

5 %

**INTERNATIONAL REGULATIONS****WHMIS Classification**

Class B, Division 2: Flammable liquid.

Class D, Division 2, Subdivision B: Toxic material.

**European Union**

Classification according to Regulation (EU) 1272/2008.

Flammable liquids, Category 2

Eye irritation, Category 2

Acute toxicity (Oral), Category 4

Acute toxicity (Inhalation), Category 4

Acute toxicity (Dermal), Category 4

<b>Australia. Inventory of Chemical Substances (AICS)</b>	Listed
<b>Japan. Inventory of Existing and New Chemical Substances (ENCS)</b>	Listed
<b>Japan. Industrial Safety &amp; Health Law (ISHL) Inventory</b>	Listed
<b>Canada. Domestic Substances List (DSL) Inventory</b>	Listed
<b>Canadian Non-Domestic Substance Listing (NDSL)</b>	Not listed
<b>European Inventory of Existing Commercial Chemical Substances (EINECS) Listing</b>	Listed
<b>Philippines. Inventory of Chemicals / Chemical Substances (PICCS)</b>	Listed
<b>Korea. Existing Chemicals Inventory (KECI)</b>	Listed
<b>China. Inventory of Existing Chemical Substances (IECSC)</b>	Listed
<b>Mexico. National Inventory of Chemical Substances (INSQ)</b>	Listed
<b>New Zealand. Inventory of Chemicals (NZIoC)</b>	Listed
<b>Switzerland. Inventory of Notified New Substances (CHINV)</b>	Listed
<b>Taiwan. National Existing Chemical Inventory (NECI)</b>	Listed

Please note: The names and CAS numbers which are used for this product in the stated inventories may deviate from the information which is listed in Section 3.

**STATE REGULATIONS****California Prop. 65**Components

Methanol

CAS-No.

67-56-1

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**Ethanol SDA 3A 190 Proof**

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**SECTION 16 OTHER INFORMATION**

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**HAZARD RATINGS**

	<u>Health</u>	<u>Flammability</u>	<u>Physical Hazard/ Instability</u>
<b>HMIS®</b>	2	3	0
<b>NFPA</b>	2	3	0

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