

## SAFETY DATA SHEET

### Section 1: IDENTIFICATION

**Product Name:** Ethanol 190 Proof

**Product Code:** EA 190

**MSDS Date:** April 28, 2015

Solvent Direct, Inc  
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### Section 2: HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW:

**GHS Classification:**

Flammable liquids (Category 2), H225

**GHS Labeling**



**Symbol:**

**Signal Word:** Danger

**Hazard Statements:**

Highly flammable liquid and vapor

**Precautionary Statements:**

**Prevention:**

Keep away from heat/sparks/open flames/hot surfaces-no smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use only non-sparking tools.

Take precautionary measure against static discharge.

Wear protective gloves/eye protection/face protection

**Response:**

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water shower.

In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.

**Storage:**

Store in a well-ventilated place. Keep cool.

**Disposal:**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Potential Health Effects:** See Section 11 for more information

This product does not contain carcinogens or potential carcinogens as listed by OSHA, IARC, or NTP.

This material contains components that are considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Potential Environmental Effects:** See Section 12 for more information.

### Section 3: COMPOSTION/INFORMATION ON INGREDIENTS

No.	Component CAS REG. NO.	Amount %	OSHA		ACGIH	
			TWA	STEL	TWA	STEL
1	Ethyl Alcohol CAS #64-17-5	90-100	1000 ppm	Not Availab le	1000 ppm	Not Availab le

### Section 4: FIRST AID MEASURES

#### Emergency first aid procedures by route of exposure:

- Inhalation:** If symptoms are experience, remove source of contamination or move victim to fresh air. If affected person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
- Ingestion:** Do not induce vomiting. If the material is swallowed, get medical attention or advice.
- Skin:** If irritation is experienced, flush with water. If irritation persists, get medical attention.
- Eyes:** Immediately flush eyes with water for at least 15 minutes while holding eyelids open. If symptoms persist, get medical attention.

### Section 5: FIRE FIGHTING MEASURES

- Flash Point: (ethyl alcohol)** 13°C (55.4°F)  
**Auto-ignition Temperature: (ethyl alcohol)** 363°C (685.4°F)  
**Lower Explosion Limit: (ethyl alcohol)** 3.3%  
**Upper Explosion Limit: (ethyl alcohol)** 19.0%  
**Flammability Classification:** Class IB Flammable Liquid

#### Suitable Extinguishing Media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### Products of Combustion:

Upon decomposition this product may emit carbon dioxide, carbon monoxide, and/or low molecular weight hydrocarbons.

#### Fire Fighting Equipment/Instructions:

Wear protective clothing and equipment suitable for the surrounding fire, including helmet, facemask, and self contained breathing apparatus.

HAZARD	HMIS	NFPA
Toxicity	1	2
Fire	3	3
Reactivity	0	0

### Section 6: ACCIDENTAL RELEASE MEASURES

**Personal Protection:** For large spills wear gloves, Tyvek suits, safety glasses, and appropriate NIOSH approved respiratory protection. Keep unnecessary personnel away. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material.

**Special Properties:** Flammable Liquid! This material releases vapors at or below ambient temperatures. When mixed with air in certain proportions and exposed to an ignition source, its vapor can cause a flash fire. Use only with adequate ventilation. Vapors are heavier than air and may travel long distances along the ground to an ignition source and flash back. A vapor and air mixture can create an explosion hazard in confined spaces such as sewers. If container is not properly cooled, it can rupture in the heat of a fire.

**Environmental Precautions:** Prevent discharge to open bodies of water, municipal sewers, and watercourses.

**Method for Containment:** Absorb spilled liquid in suitable non-flammable inert material such as clay, vermiculite or diatomaceous earth.

**Methods for Clean-up:** Ventilate area of leak or spill. Use spark-proof tools to sweep or scrape up and containerize in approved chemical waste container. Wash spill area with water.

## Section 7: HANDLING AND STORAGE

### Handling:

Keep away from heat, sparks and flame. Use only with adequate ventilation.

To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

### Storage:

Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

## Section 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

**Engineering Controls:** Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

### Personal Protective Equipment (PPE)

**Respiratory Protection:** Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

**Eye/Face Protection:** Safety glasses with side shields are recommended as minimum protection in industrial settings.

**Hand Protection:** Butyl rubber gloves

**Body:** Avoid skin contact. If product comes in contact with clothing, immediately remove soaked clothing and shower.

### Other Protective Equipment:

Facilities storing or utilizing this material should be equipped with eyewash and safety shower facilities.

See section 3 for exposure limits.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance, State</b>	Clear liquid
<b>Color</b>	Colorless
<b>Odor</b>	Not available
<b>pH (1%soln/water)</b>	Not Available
<b>Vapor Density (Ethyl Alcohol)</b>	1.6
<b>Boiling Point (Ethyl Alcohol)</b>	78.5°C
<b>Vapor Pressure (Ethyl Alcohol)</b>	57.3 hPa at 20°C
<b>Melting Point (Ethyl Alcohol)</b>	-114.1°C
<b>Freezing Point (Ethyl Alcohol)</b>	Not Available
<b>Flash Point (See Section 5)</b>	
<b>Flammability Properties (See section 5)</b>	
<b>Solubility (in water)</b>	Soluble
<b>Specific Gravity (Ethyl Alcohol)</b>	0.78-0.8

Evaporation Rate	Not Available
Octanol/Water partition coefficient (Kow) (Ethyl Alcohol)	-0.32
Auto-ignition temperature: (Ethyl Alcohol)	363°C
Decomposition temperature:	Not Available
Viscosity:	Not Available

## Section 10: STABILITY AND REACTIVITY

**Stability:** This material is considered stable at ambient temperatures 70°C (21°C).

**Condition to Avoid:** Flames, sparks, electrostatic discharge, heat and other ignition sources.

**Incompatible Materials:** This product reacts with strong acid, strong bases, and oxidizing agents.

**Hazardous Decomposition:** Upon decomposition, this product evolves carbon monoxide, carbon dioxide, and/or low weight hydrocarbons.

**Hazardous Reactions:** This product will not undergo polymerization.

## Section 11: TOXICOLOGICAL INFORMATION

### ACUTE EFFECTS:

#### Analysis LD50

Ethyl Alcohol (64-17-5)

Oral LD50 Rat: 7060 mg/kg

### CHRONIC EFFECTS:

Ethyl Alcohol (64-17-5)

**Carcinogenic Effects:** A4 - Not classifiable for human or animal by ACGIH.

**Mutagenic Effects:** Not Available.

**Teratogenic Effects:** Not Available.

**Developmental Toxicity:** Ethyl alcohol is a developmental toxin when consumed during pregnancy

**Target Organs:** When consumed, ethyl alcohol can target the respiratory system, skin, eyes, CNS, liver, blood, and reproductive system. **Inhalation:** May cause irritation to the mucous membranes of the upper respiratory tract. Exposure over 1000 ppm may cause headache, drowsiness, lassitude, loss of appetite, inability to concentrate, throat irritation **Ingestion:** Can cause depression of Central Nervous System, nausea, vomiting, diarrhea, intoxication, and in acute cases, death **Eye:** Liquid and vapor may cause irritation.

Splashes may cause temporary pain and blurred vision **Skin:** May cause irritation, cracking, flaking, and defatting of skin on prolonged contact **Chronic Exposure:** Prolonged skin contact causes drying and cracking of skin. May affect nervous system, liver, blood, reproductive system. **Signs and Symptoms:** Headache, drowsiness, lassitude, loss of appetite, inability to concentrate, irritation of throat/eye/skin, depression of central nervous system, nausea, vomiting, diarrhea, skin defatting.

## Section 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** Ethyl Alcohol (64-17-5)

96 hour LC50 *Oncorhynchus mykiss*: 12,900 mg/L (flow-through) (30days old)

96 hour LC50 *Pimephales promelas*: 14.2 mg/L

5 min EC50 *Photobacterium phosphoreum*: 35,470 mg/L

30 min EC50 *Photobacterium phosphoreum*: 34,634 mg/L

48 hour EC50 *Daphnia magna*: 9,268 mg/L

24 hour EC50 *Daphnia magna*: 10,800 mg/L

## Section 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, and federal regulations.

## Section 14: TRANSPORTATION INFORMATION

**Proper Shipping Name:** Ethyl Alcohol

**Hazard Class:** 3

**Identification No.:** UN1170

**Packing Group:** II

**Label:** Flammable Liquid

## Section 15: REGULATORY INFORMATION

**TSCA Inventory** This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.

**SARA 302/304** The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.

**CERCLA** The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are: No components were identified.

**SARA 311/312 Hazard** The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories: fire, Acute (Immediate) Health Hazard, Chronic (Delayed) Health Hazard

**California Prop 65:**

## Section 16: OTHER SUPPLEMENTAL INFORMATION

**Prepared by: TransChem, Inc. on February 10, 2014**

**Disclaimer:**

The information and recommendations contained in the Safety Data Sheet (SDS) are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The information and recommendations set forth herein are presented in good faith and believed to be correct as of this date hereof.

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