

COMPANY IDENTITY: SOLVCHEM, INC.  
PRODUCT IDENTITY: ETH1A3 Denatured Ethanol 1901 (190 proof)  
NEW MSDS DATE: 04/10/2007

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## MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet conforms to the requirements of ANSI Z400.1.  
**THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)**  
**IMPORTANT: Read this MSDS before handling & disposing of this product.**  
**Pass this information on to employees, customers, & users of this product.**

### SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

PRODUCT IDENTITY: ETH1A3 Denatured Ethanol 1901 (190 proof)  
COMPANY IDENTITY: SOLVCHEM, INC.  
COMPANY ADDRESS: 4704 SHANK ROAD  
COMPANY CITY: PEARLAND, TX 77588-0490  
COMPANY PHONE: 1-281-485-5377  
CHEMTREC PHONE: 1-800-424-9300

### SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CONTAINS: 80-90% ETHANOL (64-17-5)[200-578-6],  
0-10% WATER (7732-18-5),  
0-10% ETHYL ACETATE (141-78-6)[205-500-4],  
0-10% METHANOL (67-56-1)[200-659-6],  
0- 1% METHYL ISOBUTYL KETONE (108-10-1)[203-550-1]

Number in parentheses is CAS #, number in brackets is European EC #.

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### SECTION 3. HAZARDS IDENTIFICATION

#### RISK STATEMENTS:

R11 Highly Flammable  
R41 Risk of serious damage to eyes.  
R36/37/38 Irritating to eyes, respiratory system and skin.  
R39/25 Toxic danger of very serious irreversible effects if swallowed

#### SAFETY STATEMENTS:

S7 Keep container tightly closed.  
S9 Keep container in a well-ventilated place.  
S16 Keep away from sources of ignition. No smoking.  
S24 Avoid contact with skin.  
S45 In case of accident, or if you feel unwell, seek medical advice immediately (Show the label where possible).

### SECTION 4. FIRST AID MEASURES

#### EYE CONTACT:

For eyes, flush with plenty of water for 15 minutes & get medical attention.

#### SKIN CONTACT:

In case of contact with skin immediately remove contaminated clothing. Wash thoroughly with soap & water.  
Wash contaminated clothing before reuse.

#### INHALATION:

After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped give artificial respiration.

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**SWALLOWING:**

If swallowed, CALL A PHYSICIAN IMMEDIATELY! Induce vomiting promptly using physician's instructions or by having patient stick finger down throat. Never give anything by mouth to an unconscious person

**ETH1A3 SECTION 5. FIRE FIGHTING MEASURES**

**EXTINGUISHING MEDIA**

NFPA Class B extinguishers(Carbon Dioxide or foam)for Class I B liquid fires.

**SPECIAL FIRE FIGHTING PROCEDURES**

Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots). Use NIOSH approved positive-pressure self-contained breathing apparatus.

**UNUSUAL EXPLOSION AND FIRE PROCEDURES**

**HIGHLY FLAMMABLE!! VAPORS CAN CAUSE FLASH FIRE**

Keep container tightly closed. Isolate from oxidizers, heat, sparks, electric equipment & 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!

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

**CONTAINMENT TECHNIQUES**

Stop spill at source. Dike area & contain.

**CLEAN-UP PROCEDURES:**

Clean up remainder with absorbent materials. Mop up & dispose of. Persons without proper protection should be kept from area until cleaned up.

**SECTION 7. HANDLING AND STORAGE**

**HANDLING**

Isolate from oxidizers, heat, sparks, electric equipment & open flame. 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 gloves, apron & footwear impervious to this 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!

**STORAGE**

Do not store above 49 C/120 F. Store large amounts in structures made for OSHA Class I B liquids. Keep container tightly closed & upright when not in use to prevent leakage.

**ETH1A3 SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION:**

**EXPOSURE CONTROLS**

Ventilate to keep vapors of this material below 405 ppm.  
If over TLV, in accordance with 29 CFR 1910.134,  
Use NIOSH approved positive-pressure self-contained breathing apparatus.  
Consult Safety Equipment Supplier. Use explosion-proof equipment.

**VENTILATION**

LOCAL EXHAUST	: Necessary
MECHANICAL (GENERAL)	: Acceptable
SPECIAL	: None
OTHER	: None

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#### PERSONAL PROTECTIONS:

Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.

#### WORK & HYGIENIC PRACTICES:

Provide readily accessible eye wash stations & safety showers. Wash at end of each work shift & before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated. Destroy contaminated Leather articles. Launder or discard contaminated clothing.

### SECTION 9. PHYSICAL DATA

APPEARANCE :	Liquid, Water-White
ODOR :	Alcohol
BOILING RANGE :	63 77 100 C / 147 171 212 F
AUTO IGNITION TEMPERATURE :	343 C / 650 F (Lowest Component)
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	1.4 (Lowest Component)
FLASH POINT (TEST METHOD):	-1 C / 29 F (TCC)
FLAMMABILITY CLASSIFICATION:	Class I B
GRAVITY @ 60 F :	
API :	43.0
SPECIFIC GRAVITY (Water=1) :	.811
POUNDS/GALLON :	6.754
VOC'S (>0.44 Lbs/Sq In) :	93.2 Vol. % / 756.0 g/L / 6.297 Lbs/Gal
TOTAL VOC'S (TVOC) :	94.4 Vol. % / 755.1 g/L / 6.290 Lbs/Gal
NONEXEMPT VOC'S (CVOC) :	94.4 Vol. % / 755.1 g/L / 6.290 Lbs/Gal
HAZARDOUS AIR POLLUTANTS (HAPS) :	1.9 Wt. % / 15.5 g/L / .129 Lbs/Gal
VAPOR PRESSURE (mm of Hg)@20 C	41.0
NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C)	38.1
VAPOR DENSITY (air=1) :	1.5
WATER ABSORPTION :	Appreciable
REFRACTIVE INDEX :	1.362

### SECTION 10. STABILITY & REACTIVITY

#### STABILITY

Stable

#### CONDITIONS TO AVOID

Isolate from oxidizers, heat, sparks, electric equipment & open flame

#### MATERIALS TO AVOID

Isolate from strong oxidizers such as permanganates, chromates & peroxides.

#### HAZARDOUS DECOMPOSITION PRODUCTS

Carbon Monoxide, Carbon Dioxide from burning.

#### HAZARDOUS POLYMERIZATION

Will not occur

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### SECTION 11. TOXICOLOGICAL INFORMATION

MATERIAL	CAS #	TWA (OSHA)	TLV (ACGIH)	HAP
Ethanol	64-17-5	1000 ppm	1000 ppm A4	No
Water	7732-18-5	None Known	None Known	No
Ethyl Acetate	141-78-6	400 ppm	400 ppm	No
Methanol	67-56-1	200 ppm S	200 ppm S	Yes

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Methyl Isobutyl Ketone 108-10-1 100 ppm 50 ppm Yes  
Each component showing 'Yes' under "HAP" is an EPA Hazardous Air Pollutant.

MATERIAL	CAS #	CEILING	STEL (OSHA/ACGIH)
Methanol	67-56-1	None Known	250 ppm
Methyl Isobutyl Ketone	108-10-1	None Known	75 ppm

#### ACUTE HAZARDS

##### EYE & SKIN CONTACT:

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

##### INHALATION:

Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression. Vapor harmful. Breathing vapor can cause irritation. Acute overexposure can cause damage to kidneys, blood, nerves, liver & lungs.

##### SWALLOWING:

Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea.

#### SUBCHRONIC HAZARDS/CONDITIONS AGGREGATED

##### CONDITIONS AGGREGATED

Chronic overexposure can cause damage to kidneys, blood, nerves, liver & lungs. Persons with severe skin, liver or kidney problems should avoid use.

#### CHRONIC HAZARDS

CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS: This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%. Absorption thru skin may be harmful. Studies with laboratory animals indicate this product can cause damage to fetus.

#### SECTION 12. ECOLOGICAL INFORMATION

##### MAMMALIAN INFORMATION:

MATERIAL	CAS #	LOWEST KNOWN LETHAL DOSE DATA
		LOWEST KNOWN LD50 (ORAL)
Ethyl Acetate	141-78-6	5600.0 mg/kg(Rats)
		LOWEST KNOWN LC50 (VAPORS)
Ethyl Acetate	141-78-6	1600 ppm (Rats)

##### AQUATIC ANIMAL INFORMATION:

The most sensitive known aquatic group to any component of this product is:  
Goldfish 250 ppm or mg/L (24 hour exposure) Keep out of sewers and natural water supplies.

##### MOBILITY

This material is a mobile liquid.

##### DEGRADABILITY

This product is completely biodegradable

##### ACCUMULATION

This product does not accumulate or biomagnify in the environment.

### SECTION 13. DISPOSAL CONSIDERATIONS

Recycle / dispose of observing national, regional, state, provincial and local  
Health, safety & pollution laws. If questions exist, contact the appropriate agencies

### SECTION 14. TRANSPORT INFORMATION

DOT SHIPPING NAME: UN1987, Alcohols, n.o.s (Ethanol, Methanol), 3, PG-II  
DRUM LABEL: (FLAMMABLE LIQUID)  
IATA / ICAO: UN1987 Alcohols, n.o.s (Ethanol, Methanol), 3, PG-II  
IMO / IMDG: UN1987 Alcohols, n.o.s (Ethanol, Methanol), 3, PG-II  
EMERGENCY RESPONSE GUIDEBOOK NUMBER: 127

### ETH1A3 SECTION 15. REGULATORY INFORMATION

EPA REGULATION:  
SARA SECTION 311/312 HAZARDS: Acute Health, Fire

All components of this product are on the TSCA list.

SARA TITLE III INGREDIENTS	CAS#	WT. %	(REG. SECTION)	RQ(LBS)
Ethanol	64-17-5	<90	(311,312)	None
Ethyl Acetate	141-78-6	<10	(311,312)	5000
*Methanol	67-56-1	<10	(311,312,313,RCRA)	5000
*Methyl Isobutyl Ketone	108-10-1	< 1	(311,312,313,RCRA)	5000

STATE REGULATIONS:  
THIS PRODUCT MEETS REQUIREMENTS OF SOUTHERN CALIFORNIA AQMD RULE 443.1 &  
SIMILAR REGULATIONS

### INTERNATIONAL REGULATIONS

The components of this product are listed on the chemical inventories of the following countries:  
Australia, Canada, Europe (EINECS), Japan, Korea, United Kingdom.

### SECTION 16. OTHER INFORMATION

HAZARD RATINGS: HEALTH (NFPA): 1 HEALTH (HMIS): 2  
FLAMMABILITY: 3 REACTIVITY: 0

This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

### EMPLOYEE TRAINING

Employees should be made aware of all hazards of this material (as stated in this MSDS) before handling it.

### NOTICE

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.