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Rev. 6

## 1. IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND THE COMPANY/UNDERTAKING

**Product Name:** Ethanol, 70% Solution  
**Product Code:** IB15727  
**Recommend Use:** For further manufacturing use only  
Not for human or animal drug use  
**Synonyms:** ABSOLUTE ETHANOL \* AETHANOL (GERMAN) \* AETHYLALKOHOL (GERMAN) \* ALCOHOL \* ALCOHOLS, N.O.S. (UN1987)(DOT) \* ALCOHOL, ANHYDROUS \* ALCOHOL DEHYDRATED \* ALCOOL ETHYLIQUE (FRENCH) \* ALCOOL ETILICO (ITALIAN) \* ALCOHOLS, TOXIC, N.O.S. (UN1986)(DOT) \* ALGRAIN \* ALKOHOL (GERMAN) \* ALKOHOLU ETYLOWEGO (POLISH) \* ANHYDROL \* COLOGNE SPIRIT \* ETANOLO (ITALIAN) \* ETHANOL (ACGIH:DOT:OSHA) \* ETHANOL SOLUTIONS (UN1170)(DOT) \* ETHYL ALCOHOL (DOT:OSHA) \* ETHYL ALCOHOL ANHYDROUS \* ETHYL ALCOHOL SOLUTIONS (UN1170)(DOT) \* ETHYL HYDRATE \* ETHYL HYDROXIDE \* ETYLOWY ALKOHOL (POLISH) \* FERMENTATION ALCOHOL \* GRAIN ALCOHOL \* JAYSOL S \* METHYLCARBINOL \* MOLASSES ALCOHOL \* NCI-C03134 \* POTATO ALCOHOL \* SD ALCOHOL 23-HYDROGEN \* SPIRITS OF WINE \* SPIRIT \* TECSOL \* UN1170(DOT) \* UN1986(DOT) \* UN1987(DOT) \*

**Company:** IBI SCIENTIFIC  
7445 Chavenelle Road  
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**Emergency Tele. Number:** 3E Company (Acct# 9027) 1-800-451-8346 / (001) 760-602-8703  
**Company Tele. Number:** 1-800-253-4942 / (001) 563-690-0484  
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## 2. HAZARDOUS IDENTIFICATION

### GHS – Classification

**OSHA Regulatory Status:** This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29CFR 1910.1200)

Serious Eye Damage/Eye Irritation	Category 2
Specific target organ toxicity (single exposure)	Category 1
Flammable liquids	Category 1

**Signal Word:** Danger



**Appearance:** Colorless

**Physical State:** Liquid

**Odor:** Mild, rather pleasant, like wine or whiskey

**Hazard Statements:** H225-Highly flammable liquid and vapor \* H319-Causes serious eye irritation \* H370-Causes damage to organs

**Precautionary Statements:** P260-Do not breathe dust/fume/gas/mist/vapors/spray  
P264-Wash face, hands, and any exposed skin thoroughly after handling  
P270-Do not eat, drink or smoke when using this product  
P307+P311-IF EXPOSED: Call a POISON CENTER or doctor/physician  
P405-Store locked up  
P501-Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified:** Not regulated

**Other Information:** May be harmful if swallowed  
0% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<b>Chemical Name:</b>	<u>Ethanol</u>	<u>Methyl alcohol</u>
<b>EC No.:</b>	EEC No. 200-578-6	EEC No. 200-659-6
<b>REACH Reg. No.:</b>	Not Available	Not Available
<b>CAS No.:</b>	64-17-5	67-56-1
<b>Weight %:</b>	69 - 71	0 - 3
<b>Classification:</b>	F; R11	F; R11; T; R23/24/25-39/23/24/25

### 4. FIRST AID MEASURES

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

**Skin Contact:** Wash off immediately with soap and plenty of water, removing all contaminated clothes and shoes.

**Inhalation:** Move to fresh air. If not breathing, give artificial respiration.

**Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth.

**Notes to Physician:** Treat Symptomatically.

### 5. FIRE FIGHTING MEASURES

**Flammable Properties:** Flammable liquid

**Flash Point:** 13°C / 55°F

**Suitable Extinguishing Media:** Use water spray to cool fire-exposed containers  
Dry chemical, CO<sub>2</sub>, appropriate foam

**Hazardous Combustion Products:** Carbon oxides

**Explosion Data**

Sensitivity to Mechanical Impact:	Not sensitive
Sensitivity to Static Discharge:	Not sensitive

**Protective Equip. & Precautions for Firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equiv.) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions:</b>	Avoid contact with skin, eyes, and clothing. Use personal protective equipment. Ensure adequate ventilation.
<b>Methods for Containment:</b>	Prevent further leakage or spillage, if safe to do so.
<b>Methods for Cleaning Up:</b>	Absorb on sand or vermiculite and place in closed containers for disposal. Use non-sparking tools and equipment. Ventilate area and wash spill site after material pickup is complete.

## 7. HANDLING AND STORAGE

<b>Handling:</b>	Handle in accordance with good industrial hygiene and safety practice. Keep away from heat, sparks, and open flames.
<b>Storage:</b>	Keep container tightly closed in a dry, cool, and well-ventilated place. Keep away from heat, sparks, and open flames.
<b>Incompatible Products:</b>	Oxidizing agents, Peroxides, Acids, Anhydrides, Acid chlorides, Alkali metals, Ammonia.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Chemical Name:</b>	<u>Ethanol - #64-17-5</u>
ACGIH TLV:	STEL: 100ppm
OSHA PEL:	TWA: 1000ppm / TWA: 1900mg/m <sup>3</sup>
NIOSH IDLH:	IDLH: 3300ppm / TWA: 1000ppm / TWA: 1900mg/m <sup>3</sup>
<b>Chemical Name:</b>	<u>Methyl alcohol - #67-56-1</u>
ACGIH TLV:	STEL: 250ppm / TWA: 200ppm
OSHA PEL:	TWA: 200ppm / TWA: 260mg/m <sup>3</sup>
NIOSH IDLH:	IDLH: 6000ppm / TWA: 200ppm / TWA: 260mg/m <sup>3</sup> / STEL: 325mg/m <sup>3</sup> / STEL: 250ppm

**Engineering Measures:** Showers, Eyewash Stations, Ventilation Systems

### Personal Protective Equipment

Eye/Face Protection:	Avoid contact with eyes. Safety glasses with side-shields.
Skin & Body Protection:	Wear protective gloves/clothing.
Respiratory Protection:	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Clear, colorless liquid
<b>Odor:</b>	Mild, rather pleasant, like wine or whiskey
<b>Odor Threshold:</b>	No information available
<b>Decomposition Temp. °C:</b>	No information available
<b>Freezing Point:</b>	No information available
<b>Initial Boiling Point:</b>	No information available
<b>Physical State:</b>	Liquid
<b>pH:</b>	No data available
<b>Flash Point:</b>	> 14°C / > 57°F
<b>Flammable Properties</b>	Flammable liquid
<b>Autoignition Temp. °C:</b>	421°C / 789°F
<b>Boiling Point/Range:</b>	75°C / 167°F
<b>Melting Point/Range:</b>	-130°C

<b>Flammability Limits (Air):</b>	<u>Upper</u> -No data available * <u>Lower</u> -No data available
<b>Explosion Limits</b>	<u>Upper</u> -19% * <u>Lower</u> -4.3%
<b>Explosive Properties:</b>	No information available
<b>Oxidizing Properties:</b>	No information available
<b>Evaporation Rate:</b>	No information available
<b>MMHG @ 37.8°C:</b>	No data available
<b>Vapor Density:</b>	No data available
<b>Specific Gravity:</b>	0.8800 Max.
<b>Density:</b>	1.59
<b>Solubility:</b>	Miscible
<b>Partition Coefficient (n-octanol/water):</b>	No data available
<b>Viscosity:</b>	No information available

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under recommended storage conditions
<b>Incompatible Products:</b>	Oxidizing agents, Peroxides, Acids, Anhydrides, Acid chlorides, Alkali metals, Ammonia
<b>Conditions to Avoid:</b>	Keep away from heat, sparks, and open flames
<b>Hazardous Decomposition Products:</b>	Carbon oxides
<b>Hazardous Polymerization:</b>	Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

Product Information:	Risk of serious damage to eyes. Harmful if swallowed, inhaled, or absorbed through skin	
Chemical Name:	<u>Ethanol</u>	<u>Methyl alcohol</u>
LD50 Oral:	7060mg/kg (Rat)	6200mg/kg (Rat)
LD50 Dermal:	-	15800mg/kg (Rabbit)
LC50 Inhalation:	124.7mg/L (Rat) 4h	22500ppm (Rat) 8h * 64000ppm (Rat) 4h

### Chronic Toxicity

Chronic Toxicity:	Prolonged skin contact may defat the skin and produce dermatitis.	
Chemical Name:	Ethanol - #64-17-5	Methanol - #67-56-1
ACGIH:	A3	-
IARC:	Group 1	-
NTP:	Known	-
OSHA:	X	-

<b>Reproductive Toxicity:</b>	No information available
<b>STOT – single exposure:</b>	No information available
<b>STOT – repeated exposure:</b>	No information available
<b>Chronic toxicity:</b>	Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.
<b>Target Organ Effects:</b>	Nerves, Eyes, Kidneys, Heart, Cardiovascular system, Gastrointestinal tract (GI)
<b>Aspiration hazard:</b>	No information available

### Numerical measures of toxicity – Product Information:

**Unknown Acute Toxicity:** 0% of the mixture consists of ingredient(s) of unknown toxicity

**The following values are calculated based on chapter 3.1 of the GHS document.**

## 12. ECOLOGICAL INFORMATION

<b><u>Ecotoxicity:</u></b>	Harmful to aquatic organisms
<b>Chemical Name:</b>	<u>Ethanol</u>
Toxicity to Algae:	-
Toxicity to Fish:	LC50 = 12900mg/L Oncorhynchus mykiss (96h) LC50 = 14.2mg/L Pimephales promelas (96h)
Microtox	EC50 = 34634mg/L (30min) EC50 = 35470mg/L (5min)
Daphnia Magna (Water Flea):	EC50 = 10800mg/L (24h) EC50 = 9268mg/L (48h)
Log Pow	-0.32
<b>Chemical Name:</b>	<u>Methyl alcohol</u>
Toxicity to Algae:	-
Toxicity to Fish:	LC50 = 13200mg/L Oncorhynchus mykiss (96h) LC50 = 14.2mg/L Pimephales promelas (96h)
Microtox	EC50 = 39000mg/L (25min) EC50 = 40000mg/L (15min) EC50 = 43000mg/L (5min)
Daphnia Magna (Water Flea):	-
Log Pow	-0.77

## 13. DISPOSAL CONSIDERATIONS

<b>Water Disposal Method:</b>	Dispose of material in accordance with all federal, state, and local regulations.
<b>Contaminated Packaging:</b>	Dispose of in accordance with all federal, state, and local regulations.

## 14. TRANSPORT INFORMATION

### **IATA**

UN#	UN1170
Proper Shipping Name	ETHANOL
Hazardous Class	3
Packing Group	II

### **US DOT**

UN#	UN1170
Proper Shipping Name	ETHANOL
Hazardous Class	3
Packing Group	II

## 15. TOXICOLOGICAL INFORMATION

<b><u>REACH Title VII Restrictions</u></b>	No information available	
Chemical Name:	<u>Ethanol</u>	<u>Methyl Alcohol</u>
Dangerous Substances:	X	X
Organic Solvents:	Not applicable	Class 2
Harmful Substances Whose Names are to be indicated on the Label:	Not applicable	X
Pollution Release and Transfer Registry (Class II):	Not applicable	Not applicable
Pollution Release and Transfer Registry (Class I):	Not applicable	Not applicable
Poison and Deleterious Substances Control Law:	Not applicable	Deleterious
ISHA – Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying:	Not applicable	Not applicable

ISHA – Harmful Substances Requiring Permission:	Not applicable	Not applicable
Toxic Chemical Classification Listing (TCCL):	Not applicable	97-1-80, 85% or more in mixtures
Toxic Release Inventory (TRI) – Group I:	Not applicable	Not applicable
Toxic Release Inventory (TRI) – Group II:	Not applicable	>=1.0%

**International Inventories**

TSCA:	Complies
DSL:	Complies
EINECS/ELINCS:	Complies
ENCS:	Does not comply
IECSC:	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical/chemicals which are subject to the reporting requirements of the Act & Title 40 of the Code of Federal Regulations, part 372.

Chemical Name:	Methyl alcohol - #67-56-1
Weight (%):	0 - 3
SARA 313 – Threshold (%):	1.0

**SARA 311/312 Hazard Categories**

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**Clean Air Act**

This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act.

Chemical Name:	Methyl alcohol - #67-56-1
Weight (%):	0 - 7
HAPS data:	Present
VOC Chemicals:	Group IV
Class 1 Ozone Depletors:	-
Class 2 Ozone Depletors:	-

**CERCLA**

Chemical Name:	Methyl alcohol - #67-56-1
Hazardous Substances RQs	5000lbs
Extremely Hazardous Sub. RQs:	-

**U.S. State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name:	Ethanol - #64-17-5
California Prop. 65:	Developmental

State	<u>Ethanol</u>	<u>Methyl alcohol</u>
Massachusetts	X	X
New Jersey	X	X
Pennsylvania	X	X
Illinois	-	X
Rhode Island	X	X

**International Regulations**

**Mexico**

Chemical Name:	Ethanol	Methyl alcohol
Carcinogen Status:	-	-
Exposure Limits:	Mexico: TWA = 1000ppm Mexico: TWA = 1900mg/m <sup>3</sup>	Mexico: TWA = 200ppm Mexico: TWA = 260mg/m <sup>3</sup> Mexico: STEL = 250ppm Mexico: STEL = 310mg/m <sup>3</sup>

**Canada**

**WHMIS Hazard Class**

B2 – Flammable liquid

D1B – Toxic materials



Chemical Name:	Methyl alcohol
NPRI:	X

**16. OTHER INFORMATION**

<b>Issuing Date:</b>	08-Apr-1998
<b>Revision Date:</b>	6-July-2018
<b>Revision Note:</b>	Updated address and logo
<b>Recommended Restrictions:</b>	No information available
<b>Disclaimer:</b>	The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal, and release; and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the test.

**End of Safety Data Sheet**