

## Denatured Alcohol

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Material Identity

Product Name: Denatured Alcohol  
Product Code: 7884032  
General or Generic ID: SOLVENT BLEND

#### Company

Southeastern Chemical Ind.Inc.  
660 Oak Place  
Port Orange,FL. 32127  
904-760-9332

#### Emergency Telephone Number:

CHEMTREC 800-424-9300

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by volume)
ETHYL ALCOHOL	64-17-5	82.0- 86.0
WATER	7732-18-5	3.0- 7.0
ETHYL ACETATE	141-78-6	3.0- 7.0
METHYL ALCOHOL	67-56-1	4.5

### 3. HAZARDS IDENTIFICATION

#### Potential Health Effects

##### Eye

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

##### Skin

May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns. Passage of this material into the body through the skin is possible, and may add to toxic effects from breathing or swallowing.

##### Swallowing

Swallowing this material may be harmful.

##### Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8).

##### Symptoms of Exposure

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), cough, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), leg cramps, involuntary eye movement, pain in the abdomen and lower back, respiratory depression (slowing of the breathing rate), blurred vision, shortness of breath, loss of coordination, confusion, irregular heartbeat, cyanosis (causes blue coloring of the skin and nails from lack of oxygen), anesthesia, visual impairment (including blindness), respiratory failure, coma, and death.

Continued on next page

## MATERIAL SAFETY DATA SHEET

Southeastern Chemical Ind.Inc.

Page 002  
Date Prepared: 10/06/98  
Date Printed: 01/23/99  
MSDS No: 301.0001436-007.008

Denatured Alcohol

---

### Target Organ Effects

This product contains ethanol. Alcoholic beverage consumption has been associated with brain damage, heart damage, and pancreatitis in humans. The relevance of these findings to ethanol exposure in industrial environments is uncertain. Exposure to lethal concentrations of methanol has been shown to cause damage to organs including liver, kidneys, pancreas, heart, lungs and brain. Although this rarely occurs, survivors of severe intoxication may suffer from permanent neurological damage. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: anemia, pancreatic damage, kidney damage, liver damage, lung damage, central nervous system damage, brain damage, testis damage, Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: visual impairment, liver damage.

### Developmental Information

Methanol has caused birth defects in laboratory animals, but only when inhaled at extremely high vapor concentrations. The relevance of this finding to humans is uncertain. This product contains ethanol. Alcoholic beverage consumption has been associated with birth defects in humans. The relevance of this finding to ethanol exposure in industrial environments is uncertain.

### Cancer Information

This product contains ethanol. IARC (International Agency for Research on Cancer) has determined that exposure to ethanol through chronic human consumption of alcoholic beverages can cause cancer. The relevance of this finding to ethanol exposure in industrial environments is uncertain.

### Other Health Effects

No data

### Primary Route(s) of Entry

Inhalation, Skin absorption, Skin contact, Eye contact.

---

## 4. FIRST AID MEASURES

### Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

### Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

### Swallowing

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

### Inhalation

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Continued on next page

## MATERIAL SAFETY DATA SHEET

Southeastern Chemical Ind.Inc.

Page 003  
Date Prepared: 10/06/98  
Date Printed: 01/23/99  
MSDS No: 301.0001436-007.008

### Denatured Alcohol

---

#### Note to Physicians

Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This product contains methanol which can cause intoxication and central nervous system depression. Methanol is metabolized to formic acid and formaldehyde. These metabolites can cause metabolic acidosis, visual disturbances and blindness. Since metabolism is required for these toxic symptoms, their onset may be delayed from 6 to 30 hours following ingestion. Ethanol competes for the same metabolic pathway and has been used to prevent methanol metabolism. Ethanol administration is indicated in symptomatic patients or at blood methanol concentrations above 20 ug/dl. Methanol is effectively removed by hemodialysis. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin lung (for example, asthma-like conditions), liver, kidney, central nervous system, pancreas, heart, male reproductive system, Exposure to this material may aggravate any preexisting condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease or anemias. Individuals with preexisting heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material.

---

## 5. FIRE FIGHTING MEASURES

### Flash Point

55.0 F (12.7 C) TCC

### Explosive Limit

(for product) Lower 3.3 Upper 28.0 %

### Autoignition Temperature

No data

### Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide.

### Fire and Explosion Hazards

Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

### Extinguishing Media

alcohol foam, carbon dioxide, dry chemical.

### Fire Fighting Instructions

Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

Continued on next page

## MATERIAL SAFETY DATA SHEET

Southeastern Chemical Ind.Inc.

Page 004  
Date Prepared: 10/06/98  
Date Printed: 01/23/99  
MSDS No: 301.0001436-007.008

### Denatured Alcohol

---

#### NFPA Rating

Not determined

---

## 6. ACCIDENTAL RELEASE MEASURES

### Small Spill

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

### Large Spill

Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Per good environmental management practices, prevent run-off to sewers, streams and other bodies of water. Stop spill at the source. Cover sewer grates and dike the spill. Absorb spilled material on to absorbents. Shovel materials into container. Close container tightly and dispose of properly.

---

## 7. HANDLING AND STORAGE

### Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. All five-gallon pails and larger metal containers, including tank cars and tank trucks, should be grounded and/or bonded when material is transferred. Warning. Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Eye Protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

### Skin Protection

Wear resistant gloves (consult your safety equipment supplier)., To prevent repeated or prolonged skin contact, wear impervious clothing and boots..

Continued on next page

**Denatured Alcohol**

---

**Respiratory Protections**

If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

**Engineering Controls**

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

**Exposure Guidelines**

Component

-----

ETHYL ALCOHOL (64-17-5)  
OSHA VPEL 1000.000 ppm - TWA  
ACGIH TLV 1000.000 ppm - TWA

WATER (7732-18-5)  
No exposure limits established

ETHYL ACETATE (141-78-6)  
OSHA VPEL 400.000 ppm - TWA  
ACGIH TLV 400.000 ppm - TWA

METHYL ALCOHOL (67-56-1)  
OSHA VPEL 200.000 ppm - TWA (Skin)  
OSHA VPEL 250.000 ppm - STEL (Skin)  
ACGIH TLV 200.000 ppm - TWA (Skin)  
ACGIH TLV 250.000 ppm - STEL (Skin)

---

**9. PHYSICAL AND CHEMICAL PROPERTIES****Boiling Point**

(for product) 170.6 - 174.2 F (77.0 - 79.0 C) @ 760 mmHg

**Vapor Pressure**

(for product) 45.000 mmHg @ 68.00 F

**Specific Vapor Density**

1.600 @ AIR=1

**Specific Gravity**

.817 @ 60.00 F

**Liquid Density**

6.810 lbs/gal @ 60.00 F  
.817 kg/l @ 15.60 C

**Percent Volatiles**

100.0 %

Continued on next page

MATERIAL SAFETY DATA SHEET

Southeastern Chemical Ind.Inc.

Page 006  
Date Prepared: 10/06/98  
Date Printed: 01/23/99  
MSDS No: 301.0001436-007.008

Denatured Alcohol

---

**Volatile Organic Compounds (VOC)**

100.000 %  
817.000 g/l  
6.810 lbs/gal

**Evaporation Rate**

1.70 (N-BUTYL ACETATE)

**Appearance**

CLEAR

**State**

LIQUID

**Physical Form**

HOMOGENEOUS SOLUTION

**Color**

COLORLESS

**Odor**

ALCOHOL

**pH**

Not applicable

**Viscosity**

1.4 cps

**Solubility in Water**

APPRECIABLE

---

**10. STABILITY AND REACTIVITY**

**Hazardous Polymerization**

Product will not undergo hazardous polymerization.

**Hazardous Decomposition**

May form: carbon dioxide and carbon monoxide, various hydrocarbons.

**Chemical Stability**

Stable.

**Incompatibility**

Avoid contact with: strong oxidizing agents.

---

**11. TOXICOLOGICAL INFORMATION**

No data

Continued on next page

MATERIAL SAFETY DATA SHEET

Southeastern Chemical Ind.Inc.

Page 007  
Date Prepared: 10/06/98  
Date Printed: 01/23/99  
MSDS No: 301.0001436-007.008

Denatured Alcohol

---

12. ECOLOGICAL INFORMATION

No data

---

13. DISPOSAL CONSIDERATION

**Waste Management Information**

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

---

14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101

**DOT Description:**

FLAMMABLE LIQUIDS N.O.S.,3,UN1993,II

**Container/Mode:**

55 GAL DRUM/TRUCK PACKAGE

**NOS Component:**

ETHYL ALCOHOL  
ETHYL ACETATE

RQ (Reportable Quantity) - 49 CFR 172.101

Not applicable

---

15. REGULATORY INFORMATION

**US Federal Regulations**

**TSCA (Toxic Substances Control Act) Status**

TSCA (UNITED STATES) The intentional ingredients of this product are listed.

**CERCLA RQ - 40 CFR 302.4(a)**

Component	RQ (lbs)
ETHYL ACETATE	5000
METHYL ALCOHOL	5000

**CERCLA RQ - 40 CFR 302.4(b)**

Materials without a "listed" RQ may be reportable as an "unlisted hazardous substance". See 40 CFR 302.5 (b).

**SARA 302 Components - 40 CFR 355 Appendix A**

None

**Section 311/312 Hazard Class - 40 CFR 370.2**

Immediate(X) Delayed(X) Fire(X) Reactive( ) Sudden Release of Pressure( )

Continued on next page

MATERIAL SAFETY DATA SHEET

Southeastern Chemical Ind.Inc.

Page 008  
 Date Prepared: 10/06/98  
 Date Printed: 01/23/99  
 MSDS No: 301.0001436-007.008

Denatured Alcohol

**SARA 313 Components - 40 CFR 372.65**

Section 313 Component(s)	CAS Number	%
METHANOL	67-56-1	4.49

**International Regulations  
 Inventory Status**

Not determined

**State and Local Regulations  
 California Proposition 65**

None

**New Jersey RTK Label Information**

ETHYL ALCOHOL	64-17-5
ETHYL ACETATE	141-78-6
METHYL ALCOHOL	67-56-1

**Pennsylvania RTK Label Information**

ETHANOL	64-17-5
ACETIC ACID ETHYL ESTER	141-78-6
METHANOL	67-56-1

**16. OTHER INFORMATION**

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.