

+1.703.527.3887 (INT)

# SAFETY DATA SHEET

Proprietary Solvent III-3, 200 Proof
This SDS is valid for all grades and catalog #'s

## 1. IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF SUPPLIER

**Product Identifier:** Denatured Ethanol

Synonyms: Denatured Alcohol; Ethanol denatured with Methanol, MIBK, Ethyl

Acetate, Denatonium Benzoate and Rubber Solvent

Other means of identification: Not available Recommended use of the chemical and restrictions on use:

General use solvent

**Supplier Details:** 

Greenfield Global USA, Inc. Greenfield Global USA, Inc.

58 Vale Road, Brookfield, 1101 Isaac Shelby Drive, Shelbyville,

CT 06804, USA.

Tel: 203.740.3471

Fax: 203.740.3481

KY 40065, USA.

Tel: 502.232.7600

Fax: 502.633.6100

CCN17213 CCN17213

Emergency Contact: CHEMTREC: 1.800.424.9300 (USA) / +1.703.527.3887 (International)

#### 2. HAZARDS IDENTIFICATION

#### **Emergency Overview:**

This material is HAZARDOUS by OSHA Hazard Communication definition. Flammable Liquid. Material can burn with little or no visible flame. May be irritating to the eyes, skin, and respiratory system. May cause central nervous system depression.

#### **OSHA Hazards:**

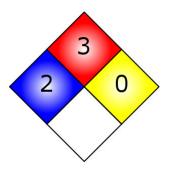
Flammable liquid, Target Organ Effect, Irritant, Toxic by inhalation, Toxic by ingestion, Toxic by skin absorption

#### **Target Organs:**

Central nervous system, Eyes, Heart, Kidney, Liver



Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA)
NFPA +1.703.527.3887 (INT)



## GHS label elements, including precautionary statements







## Signal Word:

DANGER!

#### **Hazard statement(s)**

H335 May cause respiratory irritation.
H370 Causes damage to organs

H225 Highly flammable liquid and vapor.

H302 Harmful if swallowed. H315 Causes skin irritation.

H319 Causes serious eye irritation.

#### Precautionary statement(s)

P501 Dispose of contents and container to an approved waste disposal plant.

P240 Ground/bond container and receiving equipment.
P337 + P313 If eye irritation persists: Get medical attention.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. Seek

medical attention.

P303 + P361 + P353 IF ON SKIN (or hair): Remove immediately all contaminated clothing.

Rinse skin with water.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for

extinction.

P210 Keep away from heat, sparks, open flames, and hot surfaces. No

smoking.



P233 Keep container tightly closed. +1.703.527.3887 (INT)

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

P243 Take precautionary measures against static discharge.

P241 Use explosion-proof electrical, ventilating, and lighting equipment.

P242 Use only non-sparking tools.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves and eye and face protection.

#### **GHS Classification(s)**

Flammable Liquids (Category 2)

Skin irritation (Category 2)

Specific target organ toxicity - single exposure (Category 1)

Specific target organ toxicity - single exposure (Category 3)

Acute toxicity, Oral (Category 4)

Eye irritation (Category 2A)

## Other hazards which do not result in classification:

## **Potential Health Effects:**

Organ	Description
Eyes	May cause irritation including stinging, tearing, and redness.
Ingestion	Ingestion may cause dizziness, faintness, drowsiness decreased awareness or responsiveness, nausea, vomiting, staggering gait, lack of coordination, coma and death.
Inhalation	High vapor concentration may cause burning sensation in nose and throat and stinging and watering in the eyes. At concentrations which cause irritation, dizziness, faintness, drowsiness, nausea and vomiting may also occur.
Skin	Prolonged or widespread contact may result in the absorption of potentially harmful amounts. Inhalation: High vapor concentration may cause burning sensation in nose and throat and stinging and watering in the eyes. At concentrations which cause irritation, dizziness, faintness, drowsiness, nausea and vomiting may also occur. Skin Contact: Prolonged or repeated contact may cause defatting and drying of the skin.
Chronic	Long term repeated oral exposure to ethanol may result in the development of progressive liver injury with fibrosis. Overexposure to methanol may cause eye damage and liver or kidney injury. Other Health Hazards: Repeated ingestion of ethanol by pregnant mothers has been shown to adversely affect the central nervous system of the fetus, producing a collection of effects which together constitute fetal alcohol syndrome. Medical Conditions Aggravated by Overexposure: Repeated exposure to ethanol may aggravate liver injury produced from other causes. Skin contact may aggravate dermatitis.

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical identity: Proprietary Solvent Formula III-3, 200 Proof

Common name / Synonym: Denatured Alcohol; Ethanol denatured with Methanol, MIBK, Ethyl

Acetate, Denatonium Benzoate and Rubber Solvent;

**UN #**: 1987



% Volume	Material	+1.703. <b>\$⊉</b> ₱.3887 (INT)
3.71	Methyl Alcohol	67-56-1
0.96	Methyl Isobutyl Ketone	108-10-1
0.96	Rubber Solvent (n-Hexane)	110-54-3
1.92	Ethyl Acetate	141-78-6
0.001	Denatonium Benzoate	3734-33-6
92.45	Ethanol	64-17-5

#### 4. FIRST AID MEASURES

#### General advice

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### Skin

Wash skin with soap and copious amounts of water. Seek medical attention.

#### Inhalation

Remove person to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.

#### **Eyes**

Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek medical attention.

#### Ingestion

DO NOT induce vomiting. If vomiting does occur, have victim lean forward to prevent aspiration. Rinse mouth with water. Seek medical attention. Never give anything by mouth to an unconscious individual.

#### **Note to Physician**

Symptoms vary with alcohol level of the blood. Mild alcohol intoxication occurs at blood levels between 0.05- 0.15 %. Approximately 25% of individuals show signs of intoxication at these levels. Above 0.15% the person is definitely under the influence of ethanol; 50-95% of individuals are clinically intoxicated at these levels. Severe poisoning occurs when the blood is ethanol level is 0.3- 0.5%. Above 0.5% the individual will be comatose and death can occur. The unabsorbed ethanol should be removed by gastric lavage after intubating the patient to prevent aspiration. Avoid the use of depressant drugs or the excessive administration of fluids.

## 5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

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

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):



Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA)
Carbon oxides expected to be the primary hazardous combustion product. +1.703.527.3887 (INT)

#### Special protective equipment and precautions for firefighters:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Keep unopened containers cool by spraying with water.

## **Unusual Fire and Explosion Hazards:**

- Vapors may travel to source of ignition and flash back.
- Vapors may settle in low or confined spaces.
- May produce a floating fire hazard.
- Static ignition hazard can result from handling and use.

Alcohols burn with a pale blue flame which may be extremely hard to see under normal lighting conditions. Personnel may only be able to feel the heat of the fire without seeing flames. Extreme caution must be exercised in fighting alcohol fires. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire.

#### Flammable Properties

Classification

OSHA/NFPA Class IB Flammable Liquid.

Flash point

14 °C (58 °F) - closed cup

**Autoignition temperature** 

363 °C (685.4 °F) - (Ethyl Alcohol)

#### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures:

Do not inhale vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

#### **Environmental precautions:**

Stop leak. Contain spill if possible and safe to do so. Prevent product from entering drains.

#### Methods and materials for containment and cleaning up:

Absorb with an inert dry material and place in an appropriate waste disposal container. Keep disposal containers closed when finished.

#### 7. HANDLING AND STORAGE

Precautions for safe handling:

SDS: 983 Revision Date: 09.14.15 Revision Number: 4.0 Initials: EF

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Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA) Do not get on skin or in eyes. Do not inhale vapor or mist. Keep away from sources of ignition 15.52705887 (INT) measures to prevent the buildup of electrostatic charge. Open and handle container with care. Metal containers involved in the transfer of this material should be grounded and bonded.

### Conditions for safe storage, including any incompatibilites:

Keep container tightly closed in a cool, dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leaks/spills. Consult local fire codes for additional storage information.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

## Control parameters, e.g., occupational exposure limit values or biological limit values:

### **Occupational Exposure Limits**

Component	Source	Type	Value	Note
Ethyl Acetate	US (ACGIH)	TWA	400 ppm	ACGIH Threshold Limit Value
Ethyl Acetate	US (OSHA)	TWA	400 ppm	
Ethyl alcohol	LIC (OCLIA)	TWA	1000 ppm / 1,900	29 CFR 1910.1000 Table Z-1 Limits for
Ethyl alcohol	US (OSHA)		mg/m3	Air Contaminants.
Methanol	USA (ACGIH)	WA	200 ppm	ACGIH Treshold Limit Value
Methanol	US (OSHA)	TWA	200 ppm, 260	29 CFR 1910.1000 Table Z-1 Limits for
Methanol	US (USHA)	IVVA	mg/m3	Air Contamiants.
Methyl Isobutyl Ketone	US (ACGIH)	TWA	50 ppm	
Methyl Isobutyl Ketone	US (OSHA)	TWA	100 ppm, 410	29 CFR 1910.1000 Table Z-1 Limits for
Metry Isobuty Retorie			mg/m3	Air Contaminants
Rubber Solvent	US (OSHA)	TWA	400 ppm, 1800	29 CFR 1910.1000 Table Z-1 Limits for
(n-Hexane)	03 (03HA)	1 7 7 7	mg/m3	Air Contaminants.

#### Appropriate engineering controls:

General room or local exhaust ventilation is usually required to meet exposure limit(s). Electrical equipment should be grounded and conform to applicable electrical code.

## Individual protection measures, such as personal protective equipment:

#### Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Eye protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Use equipment approved by



Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA) appropriate government standards, such as NIOSH (US) or EN166 (EU) Maintain eye wash [703:327:3887 (INT) quick-drench facilities in work area.

## Skin and body protection:

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

## Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)  Odor  Odor Specific data not available  PH Specific data not available  PH Specific data not available  Freezing point -114 °C (-173 °F)  Initial boiling point and boiling range 80 °C (176 °F)  Flash point 14 °C (58 °F) - closed cup  Evaporation rate Specific data not available - expected to be rapid.  Flammability (solid, gas) Flammable  Upper / Lower flammability or explosive limits 19%(V) / 3.3%(V) (for 100% Ethyl Alcohol)  Vapor pressure 44.6mHg (5.94 kPa)  Vapor Density 1.6 (air =1)  Relative Density Specific data not available  Solubility(ies) completely soluble  Partition coefficient n-octanol/water(ies) Specific data not available  Auto-ignition temperature Specific data not available  Formula (ETHANOL) C2H6O  Formula (ETHYL ACETATE) C4H8O2  Formula (METHYL ALCOHOL) CH4O  Formula (METHYL ALCOHOL) C6H12O  Molecular Weight (ETHANOL) 32.04 g/mol  Molecular Weight (METHYL ALCOHOL) 32.04 g/mol  Molecular Weight (METHYL ISOBUTYL KETONE) 100.16 g/mol	5.1 THORAL AND OTTEMBOAL TROI EN	TILO
Odor threshold       Specific data not available         pH       Specific data not available         Freezing point       -114 °C (-173 °F)         Initial boiling point and boiling range       80 °C (176 °F)         Flash point       14 °C (58 °F) - closed cup         Evaporation rate       Specific data not available - expected to be rapid.         Flammability (solid, gas)       Flammable         Upper / Lower flammability or explosive limits       19%(V) / 3.3%(V) (for 100% Ethyl Alcohol)         Vapor pressure       44.6mmHg (5.94 kPa)         Vapor Density       1.6 (air =1)         Relative Density       Specific data not available         Solubility(ies)       completely soluble         Partition coefficient n-octanol/water(ies)       Specific data not available         Auto-ignition temperature       363°C (685.4°F) - (For 100% Ethyl Alcohol)         Decomposition temperature       Specific data not available         Formula (ETHANOL)       C2H6O         Formula (ETHYL ACCTATE)       C4H8O2         Formula (METHYL ISOBUTYL KETONE)       C6H12O         Molecular Weight (ETHANOL)       46.07 g/mol         Molecular Weight (ETHYL ACCTATE)       88.1 g/mol         Molecular Weight (METHYL ALCOHOL)       32.04 g/mol	Appearance (physical state, color, etc.)	Liquid. Colorless.
pH Specific data not available Freezing point -114 °C (-173 °F) Initial boiling point and boiling range 80 °C (176 °F) Flash point 14 °C (58 °F) - closed cup Evaporation rate Specific data not available - expected to be rapid. Flammability (solid, gas) Flammable Upper / Lower flammability or explosive limits 19%(V) / 3.3%(V) (for 100% Ethyl Alcohol) Vapor pressure 44.6mmHg (5.94 kPa) Vapor Density 1.6 (air =1) Relative Density Specific data not available Solubility(ies) completely soluble Partition coefficient n-octanol/water(ies) Specific data not available Auto-ignition temperature 363°C (685.4°F) - (For 100% Ethyl Alcohol) Decomposition temperature Specific data not available Formula (ETHANOL) C2H6O Formula (METHYL ACETATE) C4H8O2 Formula (METHYL ISOBUTYL KETONE) C6H12O Molecular Weight (ETHANOL) 46.07 g/mol Molecular Weight (ETHYL ACETATE) 88.1 g/mol Molecular Weight (METHYL ACETATE) 88.1 g/mol Molecular Weight (METHYL ACETATE) 32.04 g/mol	Odor	Specific data not available
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Formula (METHYL ALCOHOL)  Formula (METHYL ISOBUTYL KETONE)  Molecular Weight (ETHANOL)  Molecular Weight (ETHYL ACETATE)  Molecular Weight (METHYL ALCOHOL)  Molecular Weight (METHYL ALCOHOL)  Section 2.04 g/mol	Formula (ETHANOL)	C2H6O
Formula (METHYL ISOBUTYL KETONE)  Molecular Weight (ETHANOL)  Molecular Weight (ETHYL ACETATE)  Molecular Weight (METHYL ALCOHOL)  32.04 g/mol	,	C4H8O2
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Molecular Weight (METHYL ALCOHOL) 32.04 g/mol		46.07 g/mol
		88.1 g/mol
Molecular Weight (METHYL ISOBUTYL KETONE) 100.16 g/mol		<u> </u>
	Molecular Weight (METHYL ISOBUTYL KETONE)	100.16 g/mol

# **10. STABILITY AND REACTIVITY**

Possibility of hazardous reactions	Vapors may form explosive mixture with air.
Conditions to avoid (e.g., static discharge,	Heat, flames, and sparks. Extreme temperatures and direct
shock or vibration)	sunlight.
Incompatible materials	Strong acids, strong oxidizing agents



Hazardous decomposition products	Hazardous decomposition products former 100 (1827)   Conditions Carbon oxides
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## 11. TOXICOLOGICAL INFORMATION

#### Methyl Alcohol 67-56-1

#### **Product Summary:**

Classification of teratogenicity or reproductive toxicity cannot be determined with available data for this product. No data available to designate the product as causing specific target organ toxicity through repeated exposure. No data available to designate product as an aspiration hazard.

#### **Acute Toxicity:**

LC50 (Inhl)	Rat	64,000 mg/Kg BWT	4 hours
LD50 (Oral)	Rat	5,628 mg/Kg BWT	
LD50 (Skin)	Rabbit	15,800 mg/Kg BWT	_

#### Irritation:

## **Eyes (METHANOL)**

Direct contact with the eyes produces a mild, reversible irritation, assuming treatment is initiated promptly. Methanol ingestion or inhalation can lead to visual disturbance that can proceed to blindness.

#### Skin

Standard Draize skin test (rabbit) - Dose: 20 mg/24 hrs Reaction: Moderate Repeated exposure may cause skin dryness or cracking.

## Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### Other Hazards

Organ	Description
Eyes	Irritating to the eyes.
Ingestion	Poison, may be fatal or cause blindness if swallowed. Cannot be made non-poisonous. Ingestion may
ingestion	cause gastrointestinal irritation, nausea, vomiting and diarrhea.



Inhalation	Toxic by inhalation. Vapor harmful. May be irritating to the respiratory tract. +1.703.527.3887 (INT)
Skin	Toxic in contact with skin. Irritating to skin.
Chronic	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. Experiments have shown reproductive toxicity effects on laboratory animals. May cause adverse liver effects. May cause adverse kidney effects. Methanol is slowly eliminated from the body, therefore it can have cumulative toxicity effects with repeated exposures.

#### Ethyl Acetate 141-78-6

## **Product Summary:**

Not known to be toxic to the reproductive system, teratogenic, or carcinogenic. Has demonstrated some mutagenic effects in animals.

#### **Acute Toxicity:**

LC50 (Inhalation)	Rat	22,627 ppm	4 hours
LD50 (Dermal)	Rabbit	20,000 mg/kg	
LD50 (Oral)	Rat	11,300 mg/kg	

#### Irritation:

## **Eyes**

No data available.

#### Skin

No data available

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### **Other Hazards**

Organ	Description
Eyes	Can cause serious eye irritation with common symptoms including redness, tearing, pain, and blurred vision.
INCASTION	Can be harmful if ingested leading to throat irritation, nausea, vomiting, and central nervous system effects.



Inhalation	High concentrations of vapor or mist may be harmful if inhaled. High concentrations of vapor or mist may be harmful if inhaled. High concentrations of vapor or mist may cause irritate the respiratory tract (nose, throat, and lungs). High concentrations of vapor or mist may cause nausea, vomiting, headaches, dizziness, loss of coordination, numbness, and other central nervous system effects; and/or liver and kidney damage. Massive acute overexposure may cause rapid central nervous system depression, sudden collapse, coma, and/or death.
Skin	This product may cause irritation, redness, and/ or drying. This product is not likely to be absorbed through the skin in harmful amounts. In rare instances, repeated skin contact with ethyl acetate may cause sensitization.
Chronic	Prolonged or repeated inhalation may cause toxic effects. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis). In rare instances, repeated skin contact with ethyl acetate may cause sensitization. Prolonged or repeated exposure may have reproductive toxicity or mutagenic effects.

## • Denatonium Benzoate 3734-33-6

### **Product Summary:**

No data available for the mutagenic, teratogenic, or reproductive effects of the product.

## **Acute Toxicity:**

LD50 (Oral)	Rat	584 mg/kg		
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#### Irritation:

#### **Eyes**

Causes eye irritation.

### Skin

Slightly irritating to the skin. Repeated contact with neat product may dry the skin causing cracking and/or fissuring.

### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### Other Hazards

Organ	Description



Eyes	Irritating to the eyes.	+1.703.527.3887 (INT)
Ingestion	Harmful if ingested.	,
Inhalation	May be harmful if inhaled. Irritating to the respiratory tract.	
Skin	Harmful if absorbed through skin. Irritating to skin.	

#### Methyl Isobutyl Ketone 108-10-1

## **Product Summary:**

Laboratory tests have shown teratogenic effects. No data available for the mutagenic or reproductive effects of the product. No data available to designate the product as causing specific target organ toxicity through single or repeated exposure. No data available to designate product as an aspiration hazard.

#### **Acute Toxicity:**

LC50 (Inhalation)	Rat	16.4 mg/m3	4 hours
LD50 (Dermal)	Rabbit	> 16,000 mg/kg	
LD50 (Oral)	Rat	2,080 mg/kg	

#### Irritation:

#### **Eyes (METHYL ISOBUTYL KETONE)**

Rabbit - Moderate eye irritation - 24 hours

#### Skin

Rabbit - skin irritation - 24 hours

#### Teratogenicity (METHYL ISOBUTYL KETONE)

Methyl Isobutyl Ketone is teratogenic. Fetal death and developmental abnormalities occurred in the babies of mice that inhaled Methyl isobutyl ketone.

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

## **Other Hazards**

Organ	Description
Eyes	Can be irritating to the eyes.



Ingestion	Can be harmful if ingested.	+1.703.527.3887 (INT)
Inhalation	Can be harmful, causing respiratory tract irritation, if inhaled.	, ,
Skin	Can be harmful, causing irritation, if absorbed through the skin.	

#### • Rubber Solvent (n-Hexane) 110-54-3

## **Product Summary:**

No data available for the teratogenic or mutagenic effects of the product. REPRODUCTIVE TOXICITY: Overexposure may cause reproductive disorder(s) based on tests with laboratory animals. Suspected human reproductive toxicant Suspected of damaging fertility.

## **Acute Toxicity:**

LC50 (Inhalation)	Rat	48,000 ppm	4 h
LD50 (Oral)	Rat	25,000mg/kg	

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### Other Hazards

Organ	Description	
Eyes	Causes eye irritation.	
Ingestion	May be harmful if swallowed.	
Inhalation	May be harmful if inhaled. causes respiratory tract irritation. Drowsiness and dizziness may occur.	
Skin	May be harmful if absorbed through skin. Causes skin burns.	

## 12. ECOLOGICAL INFORMATION

• Methyl Alcohol 67-56-1

Ecotoxicity (aquatic and terrestrial, where available):

**Acute Fish Toxicity (METHANOL)** 

LC50 / 96 hours Lepomis macrocirus: 15,400 mg/L / LC50 / 96 hours Fathead minnow: 29,400 mg/L



Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA)
Toxicity to Aquatic Plants (METHANOL) +1.703.527.3887 (INT)

EC50 / 96 hours Scenedesmus capricornutum: 22,000 mg/L

## Persistence and degradability:

This material is expected to be readily biodegradable. There is evidence that it is degraded under anaerobic conditions.

### Bioaccumulative potential:

Bioconcentration factor (BCF) of 0.2. This material is not expected to bioaccumulate.

#### Other adverse effects:

BOD: 600 mg/g - 1120 mg/g COD: 1420 mg/g

#### Denatonium Benzoate 3734-33-6

# Ecotoxicity (aquatic and terrestrial, where available): Acute Fish Toxicity (DENATONIUM BENZOATE)

LC50 / 96 hours Rainbow Trout >1000 mg/L

#### Persistence and degradability:

No data available

#### **Bioaccumulative potential:**

Biaccumulation is unlikely

#### Ethyl Acetate 141-78-6

#### Ecotoxicity (aquatic and terrestrial, where available):

**Acute Fish Toxicity (ETHYL ACETATE)** 

LC50 / 96 hours Fathead Minnow 230mg/L

#### Persistence and degradability:

Biodegradation is expected.

## Bioaccumulative potential:

Biaccumulation is unlikely

#### Methyl Isobutyl Ketone 108-10-1



Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA) Ecotoxicity (aquatic and terrestrial, where available): +1.703.527.3887 (INT)

Acute Toxicity to Fish (METHYL ISOBUTYL KETONE)

LC50 / 48 hours Leuciscus idus melanotus- 480 mg/L

**Toxicity to Aquatic Plants (METHYL ISOBUTYL KETONE)** 

EC50 / 48 hours Green algae- 2,000 mg/L

## Persistence and degradability:

Biotic/ Aerobic

#### Bioaccumulative potential:

No data available

#### • Rubber Solvent (n-Hexane) 110-54-3

# Ecotoxicity (aquatic and terrestrial, where available):

Acute algae toxicity (RUBBER SOLVENT/ N-HEXANE)

EC50 / 3 h / Fresh water alge - 12,840.00 mg/l

## Acute algae toxicity (RUBBER SOLVENT/N-HEXANE)

EC50 / 8 h / Skeletoma - 0.30mg/l

#### Acute fish toxicity (RUBBER SOLVENT/N-HEXANE)

LC50 / 96hr / fathead minnow - 2.5mg/l

#### Toxicity to daphnia (RUBBER SOLVENT/ N-HEXANE)

EC50 / 48h / Water flea - 3,878.00mg/l

## Persistence and degradability:

No data available

#### Bioaccumulative potential:

No data available

#### Other adverse effects:

Possible environmental hazard can result from improper handling or disposal.

## 13. DISPOSAL CONSIDERATIONS

Description of waste residues and information on their safe handling and methods of disposal, including the



# Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA) disposal of any contaminated packaging: +1.703.527.3887 (INT)

Vapors may collect in empty containers. Treat empty containers as hazardous. Dispose of spill-clean up and other wastes in accordance with Federal, State, and local regulations.

## 14. TRANSPORT INFORMATION

Description of waste residues and information on their safe handling and methods of disposal:

	<u> </u>
UN number	1987
UN proper shipping name	Alcohols, n.o.s. (ethanol, methanol)
Transport hazard class(es)	3
Packing group (if applicable)	II

#### **IMDG**

UN-Number: 1987 Class: 3 Packing Group: II

EMS-No: F-E, S-D

Proper shipping name: ALCOHOLS, N.O.S. (ETHANOL, METHANOL)

Marine pollutant: No

**IATA** 

UN-Number: 1987 Class: 3 Packing Group: II

Proper shipping name: Alcohols, n.o.s. (ethanol, methanol)

## 15. REGULATORY INFORMATION

## Safety, health and environmental regulations specific for the product in question:

### **OSHA Hazards**

Flammable liquid, Target Organ Effect, Irritant, Toxic by inhalation, Toxic by ingestion, Toxic by skin absorption

All ingredients are on the following inventories or are exempted from listing

Country	Notification
Australia	AICS
Canada	DSL
China	IECS
European Union	EINECS
Japan	ENCS/ISHL
Korea	ECL
New Zealand	NZIoC
Philippines	PICCS
United States of America	TSCA

## **SARA 302 Components**

The following components are subject to reporting levels established by SARA Title III, Section 302/304: Methanol CAS-No. 67-56-1 Revision Date 2007-07-01 Isobutyl methyl ketone CAS-No. 108-10-1 Revision Date 1993-04-24



# Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA) SARA 313 Components +1.703.527.3887 (INT)

This material does not contains any chemical components with known CAS numbers that exceed the reporting limits.

#### SARA 311/312 Hazards

Acute Health Hazard Chronic Health Hazard Fire Hazard

#### **CERCLA**

Ethyl acetate CAS-No. 141-78-6, RQ: 5,000 lbs

Methanol CAS-No. 67-56-1. RQ: 5,000 lbs

Methyl isobutyl ketone CAS No. 108-10-1 RQ: 5000 lbs

## **Massachusetts Right To Know Components**

Ethanol CAS-No.64-17-5 Revision Date 2007-03-01

Ethyl acetate CAS-No. 141-78-6 Revision Date 2007-03-01

Methanol CAS-No.67-56-1 Revision Date 2007-07-01

Methyl Isobutyl Ketone CAS-No. 108-10-1 Revision Date 1993-04-24

Rubber Solvent (No information available)

#### Pennsylvania Right To Know Components

Ethanol CAS-No.64-17-5 Revision Date 2007-03-01

Ethyl Acetate CAS-No. 141-78-6

Methanol CAS-No.67-56-1 Revision Date 2007-07-01

Methyl Isobutyl Ketone CAS-No. 108-10-1 Revision Date 1993-04-24

Rubber Solvent (No information available.)

#### **New Jersey Right To Know Components**

Ethanol CAS-No.64-17-5 Revision Date 2007-03-01

SDS: 983 Revision Date: 09.14.15 Revision Number: 4.0 Initials: EF

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Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA) Ethyl Acetate CAS-No. 141-78-6 +1.703.527.3887 (INT)

Methanol CAS-No.67-56-1 Revision Date 2007-07-01

Methyl Isobutyl Ketone CAS-No. 108-10-1 Revision Date 1993-04-24

Rubber Solvent (No information available.)

### **California Prop 65 Components**

WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. METHANOL CAS-No. 67-56-1 Revision Date 2012-03-16

WARNING! This product contains a chemical known to the State of California to cause cancer. METHYL ISOBUTYL KETONE CAS-No. 108-10-1 Revision Date 2011-11-04

WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm (ETHYL ALCOHOL) CAS No. 64-17-5 Revision Date: December 11, 2009

# 16. OTHER INFORMATION: INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS

#### Disclaimer

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