SAFETY DATA SHEET

CDA 19-5, 190 Proof
This SDS is valid for all grades and catalog #s

1. IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF SUPPLIER

Product Identifier: Ethanol
Synonyms: Denatured Alcohol; Denatured Ethanol; Completely Denatured Alcohol; CDA 19-5, 190
Other means of identification: CAS No. 64-17-5
EINECS No. 200-578-6

Recommended use of the chemical and restrictions on use:

Supplier Details:
Greenfield Global USA, Inc.
1101 Isaac Shelby Drive, Shelbyville, KY 40065, USA.
Tel: 502.232.7600
Fax: 502.633.6100
CCN17213

Greenfield Global USA, Inc.
58 Vale Road, Brookfield, CT 06804, USA.
Tel: 203.740.3471
Fax: 203.740.3481
CCN17213

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

2. HAZARDS IDENTIFICATION

Emergency Overview: 

OSHA Hazards:
Flammable liquid, Target Organ Effect, Irritant

Target Organs:
Heart, Liver, Nerves

SDS: 550  Revision Date: 06.11.15  Revision Number: 4.0  Initials: EF
Signal Word:
DANGER!

Hazard statement(s)
- H225: Highly flammable liquid and vapor.
- H319: Causes serious eye irritation.

Precautionary statement(s)
- P501: Dispose of contents and container to an approved waste disposal plant.
- P260: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
- 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.
- P403 + P235: Store in a well-ventilated place. Keep cool.
- P243: Take precautionary measures against static discharge.
Safety precautions:
- Use explosion-proof electrical, ventilating, and lighting equipment.
- Use only non-sparking tools.
- Wash hands thoroughly after handling.
- Wear protective gloves and eye and face protection.

GHS Classification(s):
- Eye irritation (Category 2B)
- Flammable Liquids (Category 2)
- Skin irritation (Category 2)
- Specific target organ toxicity - single exposure (Category 3)

Other hazards which do not result in classification:

Potential Health Effects:

<table>
<thead>
<tr>
<th>Organ</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>May cause irritation including stinging, tearing, and redness.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Ingestion may cause dizziness, faintness, drowsiness decreased awareness or responsiveness, nausea, vomiting, staggering gait, lack of coordination, coma and death.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>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.</td>
</tr>
<tr>
<td>Skin</td>
<td>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.</td>
</tr>
<tr>
<td>Chronic</td>
<td>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.</td>
</tr>
</tbody>
</table>

Chemical identity:
- Alcohol

Common name / Synonym:
- Denatured Alcohol; Denatured Ethanol; Completely Denatured Alcohol

CAS number: 64-17-5
EINECS number: 200-578-6
ICSC number: 0044
RTECS #: KQ6300000
UN #: UN1987
EC #: 603-002-00-5

<table>
<thead>
<tr>
<th>% Weight</th>
<th>Material</th>
<th>CAS</th>
</tr>
</thead>
</table>

SDS: 550  Revision Date: 06.11.15  Revision Number: 4.0  Initials: EF
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):
Carbon oxides expected to be the primary hazardous combustion product.

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

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
17 °C (62 °F) - closed cup
Autoignition temperature
363 °C (685.4 °F)

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:
Contain spill, then collect with an electrically protected vacuum cleaner or by wet-brushing and put the material into a convenient waste disposal container. Keep container closed.

7. HANDLING AND STORAGE

Precautions for safe handling:
Do not get on skin or in eyes. Do not inhale vapor or mist. Keep away from sources of ignition - No smoking. Take 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.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

### Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Component</th>
<th>Source</th>
<th>Type</th>
<th>Value</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl alcohol</td>
<td>US (OSHA)</td>
<td>TWA</td>
<td>1000 ppm / 1,900 mg/m³</td>
<td>29 CFR 1910.1000 Table Z-1 Limits for Air Contaminants.</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>US (ACGIH)</td>
<td>STEL</td>
<td>1000 ppm</td>
<td>Upper Respiratory Tract irritation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Confirmed animal carcinogen with unknown relevance to humans</td>
</tr>
<tr>
<td>Methyl Isobutyl Ketone</td>
<td>US (ACGIH)</td>
<td>STEL</td>
<td>75 ppm</td>
<td></td>
</tr>
<tr>
<td>Methyl Isobutyl Ketone</td>
<td>US (ACGIH)</td>
<td>TWA</td>
<td>50 ppm</td>
<td></td>
</tr>
<tr>
<td>Rubber Solvent (n-Hexane)</td>
<td>US (OSHA)</td>
<td>TWA</td>
<td>400 ppm, 1800 mg/m³</td>
<td>29 CFR 1910.1000 Table Z-1 Limits for Air Contaminants.</td>
</tr>
</tbody>
</table>

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 appropriate government standards, such as NIOSH (US) or EN166 (EU). Maintain eye wash fountain and 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:**
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance (physical state, color, etc.)</td>
<td>Liquid. Colorless.</td>
</tr>
<tr>
<td>Freezing point</td>
<td>-114 °C (-173 °F)</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>78 °C (173 °F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>17 °C (62 °F) - closed cup</td>
</tr>
<tr>
<td>Evaporation rate (butyl acetate = 1)</td>
<td>3.0 for pure 190 ethanol</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Flammable</td>
</tr>
<tr>
<td>Upper / Lower flammability or explosive limits</td>
<td>3.3%(V) / 1.9%(V)</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>41.6mmHg (5.55 kPa)</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>1.6 (air =1)</td>
</tr>
<tr>
<td>Relative Density</td>
<td>6.79 lbs/gal</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>100% at 20 °C for pure 190 proof ethanol</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>363 °C (685 °F)</td>
</tr>
<tr>
<td>Formula (ETHANOL)</td>
<td>C2H6O</td>
</tr>
<tr>
<td>Formula (METHYL ISOBUTYL KETONE)</td>
<td>C6H12O</td>
</tr>
<tr>
<td>Formula (N-HEXANE)</td>
<td>C6H14</td>
</tr>
<tr>
<td>Formula (WATER)</td>
<td>H2O</td>
</tr>
<tr>
<td>Molecular Weight (ETHANOL)</td>
<td>46.07 g/mol</td>
</tr>
<tr>
<td>Molecular Weight (METHYL ISOBUTYL KETONE)</td>
<td>100.16 g/mol</td>
</tr>
<tr>
<td>Molecular Weight (N-HEXANE)</td>
<td>86.18 g/mol</td>
</tr>
<tr>
<td>Molecular Weight (WATER)</td>
<td>18.02 g/mol</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possibility of hazardous reactions</td>
<td>Vapors may form explosive mixture with air.</td>
</tr>
<tr>
<td>Conditions to avoid (e.g., static discharge, shock or vibration)</td>
<td>Heat, flames, and sparks. Extreme temperatures and direct sunlight.</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>Strong acids, strong oxidizing agents</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Hazardous decomposition products formed under fire conditions. - Carbon oxides</td>
</tr>
</tbody>
</table>

11. TOXICOLOGICAL INFORMATION

- Ethyl Alcohol 64-17-5

  Signs and Symptoms of Exposure
  Central nervous system depression, narcosis, damage to the heart. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA) 
+1.703.527.3887 (INT)

Product Summary:
Ethanol is not toxic by OSHA standards. Coingestion of sedative hypnوتics or tranquilizers can increase the toxic affects of ethanol.

Acute Toxicity:

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Species</th>
<th>Value</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 (inhl)</td>
<td>Rat</td>
<td>20000ppm</td>
<td>10 hrs</td>
</tr>
<tr>
<td>LC50 (Oral)</td>
<td>Rat</td>
<td>7060mg/Kg BWT</td>
<td></td>
</tr>
<tr>
<td>LDLo (Oral)</td>
<td>Human</td>
<td>1400 mg/Kg BWT</td>
<td></td>
</tr>
</tbody>
</table>

Irritation:

**Eyes (ETHANOL)**
Eye exposure to Ethanol generally causes transient pain, irritation, and reflex lid closure. A foreign-body sensation may persist for one to two days. Vapors produce transient stinging and tearing, but no apparent adverse effects. Transiently impaired preception of color may occur with acute ingestion or chronic alcoholism. Standard Draize eye test (rabbit) - Dose: 500 mg Reaction: Severe Dose: 500 mg/24 hrs Reaction: Mild

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

Carcinogenicity
IARC: Not classifiable as a human carcinogen.
ACGIH: Not classifiable as a human carcinogen.
NTP: Not classifiable as a human carcinogen.
OSHA: Not classifiable as a human carcinogen.

Other Hazards

<table>
<thead>
<tr>
<th>Organ</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>Irritating to the eyes. May cause painful sensitization to light. May cause chemical conjunctivitis and corneal damage.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause systemic toxicity with acidosis. Advanced stages can lead to respiratory failure, kidney failure, coma, and death.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. May cause narcotic effects in high concentration. Vapors may cause dizziness or suffocation.</td>
</tr>
<tr>
<td>Skin</td>
<td>Mildly irritating to the skin. May cause dermatitis by de-fatting the skin from prolonged or repeated contact.</td>
</tr>
<tr>
<td>Chronic</td>
<td>Prolonged exposure can cause liver, kidney, and heart damage. Long term exposure can cause loss of appetite, weight loss, nervousness, memory loss, mental retardation.</td>
</tr>
</tbody>
</table>

• Water 7732-18-5
Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA)
+1.703.527.3887 (INT)

Do data available for the teratogenic, mutagenic, or reproductive toxicity effects of this product.

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

<table>
<thead>
<tr>
<th>Organ</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>May cause respiratory tract irritation upon inhalation.</td>
</tr>
</tbody>
</table>

- 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:

<table>
<thead>
<tr>
<th>LC50 (Inhalation)</th>
<th>Rat</th>
<th>16.4 mg/m3</th>
<th>4 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 (Dermal)</td>
<td>Rabbit</td>
<td>&gt; 16,000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>LD50 (Oral)</td>
<td>Rat</td>
<td>2,080 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th>Organ</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>Can be irritating to the eyes.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Can be harmful if ingested.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Can be harmful, causing respiratory tract irritation, if inhaled.</td>
</tr>
<tr>
<td>Skin</td>
<td>Can be harmful, causing irritation, if absorbed through the skin.</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>LC50 (Inhalation)</th>
<th>Rat</th>
<th>48,000 ppm</th>
<th>4 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 (Oral)</td>
<td>Rat</td>
<td>25,000mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Organ</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>Causes eye irritation.</td>
</tr>
</tbody>
</table>
12. ECOLOGICAL INFORMATION

- Ethyl Alcohol 64-17-5

Ecotoxicity (aquatic and terrestrial, where available):
Acute Fish toxicity (ETHANOL)
LC50 / 96 HOUR Oncorhynchus mykiss (rainbow trout) > 10,000 mg/l
LC50 / 96 HOUR Pimephales promelas (fathead minnow) > 13,400 mg/l

Toxicity to aquatic plants (ETHANOL)
Growth inhibition / 96 HOURS Chlorella vulgaris (Fresh water algae) 1,000 mg/l

Toxicity to microorganisms (ETHANOL)
Toxicity Threshold / Pseudomonas putida 6,500 mg/l
Summary: Inhibition of cell multiplication begins.

Persistence and degradability:
Biodegradation is expected.

Bioaccumulative potential:
Biaccumulation is unlikely

- Water 7732-18-5

Ecotoxicity (aquatic and terrestrial, where available):
Ecotoxicity
Not Applicable

Persistence and degradability:
No data available

Bioaccumulative potential:
No data available

Other adverse effects:
Methyl Isobutyl Ketone 108-10-1

Ecotoxicity (aquatic and terrestrial, where available):
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 algae - 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 disposal of any contaminated packaging:
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:

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>Alcohols, n.o.s.</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>3</td>
</tr>
<tr>
<td>Packing group (if applicable)</td>
<td>II</td>
</tr>
</tbody>
</table>

IMDG
UN-Number: UN1987 Class: 3 Packing Group: II
EMS-No: F-E, S-D
Proper shipping name: ALCOHOLS, N.O.S.
Marine pollutant: No

IATA
UN-Number: UN1987 Class: 3 Packing Group: II
Proper shipping name: Alcohols, n.o.s.

15. REGULATORY INFORMATION
Safety, health and environmental regulations specific for the product in question:

OSHA Hazards
Flammable liquid, Target Organ Effect, Irritant

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

<table>
<thead>
<tr>
<th>Country</th>
<th>Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>AICS</td>
</tr>
<tr>
<td>Canada</td>
<td>DSL</td>
</tr>
<tr>
<td>China</td>
<td>IECS</td>
</tr>
<tr>
<td>European Union</td>
<td>EINECS</td>
</tr>
<tr>
<td>Japan</td>
<td>ENCS/ISHL</td>
</tr>
<tr>
<td>Korea</td>
<td>ECL</td>
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<td>New Zealand</td>
<td>NZIoC</td>
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<td>Philippines</td>
<td>PICCS</td>
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<tr>
<td>United States of America</td>
<td>TSCA</td>
</tr>
</tbody>
</table>
Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA) +1.703.527.3887 (INT)
The following components are subject to reporting levels established by SARA Title III, Section 302: Methyl isobutyl ketone CAS-No. 108-10-1 Revision Date 1993-04-24 RQ: 5000 lbs.

SARA 313 Components
This material does not contains any chemical components with known CAS numbers that exceed the reporting limits. Methyl isobutyl ketone CAS-No. 108-10-1 Revision Date 1993-04-24

SARA 311/312 Hazards
Acute Health Hazard
Fire Hazard

CERCLA
No chemicals in this material with known CAS numbers are subject to the reporting requirements of CERCLA

Massachusetts Right To Know Components
Ethanol CAS-No.64-17-5 Revision Date 2007-03-01

Pennsylvania Right To Know Components
Ethanol CAS-No.64-17-5 Revision Date 2007-03-01

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

New Jersey Right To Know Components
Ethanol CAS-No.64-17-5 Revision Date 2007-03-01

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

California Prop 65 Components
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
Greenfield Global USA, Inc. believes that the information on this SDS was obtained from reliable sources. However,
Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA)

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