SAFETY DATA SHEET

1. Identification

Product identifier: JINX PLUS SUPER CONCENTRATED HEAVY DUTY DEGREASER

Other means of identification
SDS number: RE1000000610

Recommended restrictions
Product use: Cleaner
Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name: CLAIRE MANUFACTURING COMPANY
Address: 1000 Integrham Dr
Pacific, MO 63069
Telephone: 1-630-543-7600
Fax:

Emergency telephone number: 1-866-836-8855

2. Hazard(s) Identification

Hazard Classification

Physical Hazards
Flammable aerosol Category 1

Health Hazards
Serious Eye Damage/Eye Irritation Category 2A

Label Elements

Hazard Symbol:

Signal Word: Danger

Hazard Statement:
Extremely flammable aerosol.
Causes serious eye irritation.

Precautionary Statements
Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Storage: Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS number</th>
<th>Content in percent (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol, 2-(2-butoxyethoxy)-</td>
<td>112-34-5</td>
<td>5 - &lt;10%</td>
</tr>
<tr>
<td>Butane</td>
<td>106-97-8</td>
<td>1 - &lt;5%</td>
</tr>
<tr>
<td>2-Propanol</td>
<td>67-63-0</td>
<td>1 - &lt;5%</td>
</tr>
<tr>
<td>Alcohols, C12-14-secondary, ethoxylated</td>
<td>84133-50-6</td>
<td>1 - &lt;3%</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>1 - &lt;5%</td>
</tr>
</tbody>
</table>

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Ingestion: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

Inhalation: Move to fresh air.

Skin Contact: Wash skin thoroughly with soap and water. If skin irritation occurs: Get medical advice/attention.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: No data available.

5. Fire-fighting measures
General Fire Hazards: Use water spray to keep fire-exposed containers cool. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Vapors may travel considerable distance to a source of ignition and flash back.

Special protective equipment and precautions for firefighters

**Special fire fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind.

**Methods and material for containment and cleaning up:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

**Notification Procedures:** Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk.

**Environmental Precautions:** Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

**Precautions for safe handling:** Avoid contact with eyes. Wash hands thoroughly after handling. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use.

**Conditions for safe storage, including any incompatibilities:** Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Aerosol Level 1

8. Exposure controls/personal protection
## Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol, 2-(2-butoxyethoxy)-</td>
<td>ST ESL</td>
<td>670 µg/m³</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td></td>
<td>ST ESL</td>
<td>100 ppb</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td></td>
<td>AN ESL</td>
<td>10 ppb</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td></td>
<td>AN ESL</td>
<td>67 µg/m³</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td>Ethanol, 2-(2-butoxyethoxy)- - Inhalable fraction and vapor.</td>
<td>TWA</td>
<td>10 ppm</td>
<td>US. ACGIH Threshold Limit Values (03 2013)</td>
</tr>
<tr>
<td>Butane</td>
<td>REL</td>
<td>800 ppm 1,900 mg/m³</td>
<td>US. NIOSH: Pocket Guide to Chemical Hazards (2005)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>800 ppm 1,900 mg/m³</td>
<td>US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>1,000 ppm 1,900 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (03 2018)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>800 ppm 1,900 mg/m³</td>
<td>US. OSHA Table Z-T-A (29 CFR 1910.1000) (1989)</td>
</tr>
<tr>
<td></td>
<td>AN ESL</td>
<td>3,000 ppb</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td></td>
<td>AN ESL</td>
<td>7,100 µg/m³</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td></td>
<td>TWA PEL</td>
<td>800 ppm 1,900 mg/m³</td>
<td>US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)</td>
</tr>
<tr>
<td></td>
<td>ST ESL</td>
<td>66,000 µg/m³</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td></td>
<td>ST ESL</td>
<td>28,000 ppb</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td>2-Propanol</td>
<td>REL</td>
<td>400 ppm 980 mg/m³</td>
<td>US. NIOSH: Pocket Guide to Chemical Hazards (2005)</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>400 ppm</td>
<td>US. ACGIH Threshold Limit Values (2008)</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>500 ppm 1,225 mg/m³</td>
<td>US. OSHA Table Z-T-A (29 CFR 1910.1000) (1989)</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>500 ppm 1,225 mg/m³</td>
<td>US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>400 ppm 980 mg/m³</td>
<td>US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)</td>
</tr>
<tr>
<td></td>
<td>PEL</td>
<td>400 ppm 980 mg/m³</td>
<td>US. OSHA Table Z-T Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>400 ppm 980 mg/m³</td>
<td>US. OSHA Table Z-T-A (29 CFR 1910.1000) (1989)</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>500 ppm 1,225 mg/m³</td>
<td>US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)</td>
</tr>
<tr>
<td></td>
<td>AN ESL</td>
<td>200 ppb</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td></td>
<td>ST ESL</td>
<td>2,000 ppb</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>500 ppm 1,225 mg/m³</td>
<td>US. NIOSH: Pocket Guide to Chemical Hazards (2005)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>200 ppm</td>
<td>US. ACGIH Threshold Limit Values (2008)</td>
</tr>
<tr>
<td></td>
<td>TWA PEL</td>
<td>400 ppm 980 mg/m³</td>
<td>US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)</td>
</tr>
<tr>
<td></td>
<td>AN ESL</td>
<td>492 µg/m³</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td>Substance</td>
<td>TWA</td>
<td>20 ppm</td>
<td>US. ACGIH Threshold Limit Values (2008)</td>
</tr>
<tr>
<td>----------------------------</td>
<td>----------</td>
<td>--------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>Propane</td>
<td>REL</td>
<td>1,000 ppm 1,800 mg/m³</td>
<td>US. NIOSH: Pocket Guide to Chemical Hazards (2005)</td>
</tr>
<tr>
<td></td>
<td>PEL</td>
<td>1,000 ppm 1,800 mg/m³</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td></td>
<td>TWA PEL</td>
<td>1,000 ppm 1,800 mg/m³</td>
<td>US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1,000 ppm 1,800 mg/m³</td>
<td>US. NIOSH: Pocket Guide to Chemical Hazards (2005)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1,000 ppm 1,800 mg/m³</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td>Ethanol, 2-butoxy-</td>
<td>TWA</td>
<td>20 ppm 120 mg/m³</td>
<td>US. OSHA Table Z-1-A (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td></td>
<td>REL</td>
<td>5 ppm 24 mg/m³</td>
<td>US. NIOSH: Pocket Guide to Chemical Hazards (2005)</td>
</tr>
<tr>
<td></td>
<td>PEL</td>
<td>50 ppm 240 mg/m³</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td></td>
<td>TWA PEL</td>
<td>20 ppm 97 mg/m³</td>
<td>US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>25 ppm 120 mg/m³</td>
<td>US. NIOSH: Pocket Guide to Chemical Hazards (2005)</td>
</tr>
<tr>
<td>Ammonium hydroxide ((NH₄)(OH))</td>
<td>AN ESL</td>
<td>760 ppb</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td></td>
<td>AN ESL</td>
<td>3,700 µg/m³</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td></td>
<td>ST ESL</td>
<td>2,900 µg/m³</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td></td>
<td>ST ESL</td>
<td>600 ppb</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td>Ammonium hydroxide ((NH₄)(OH))</td>
<td>AN ESL</td>
<td>92 µg/m³</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td></td>
<td>ST ESL</td>
<td>180 µg/m³</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td>Acetic acid, phenylmethyl ester</td>
<td>TWA</td>
<td>10 ppm</td>
<td>US. ACGIH Threshold Limit Values (2008)</td>
</tr>
<tr>
<td></td>
<td>TWA PEL</td>
<td>10 ppm 61 mg/m³</td>
<td>US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)</td>
</tr>
<tr>
<td></td>
<td>ST ESL</td>
<td>100 ppb</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td>Substance</td>
<td>AN ESL</td>
<td>10 ppb</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td>-----------</td>
<td>--------</td>
<td>--------</td>
<td>--------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>ST ESL</td>
<td>610 µg/m³</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td></td>
<td>AN ESL</td>
<td>61 µg/m³</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td>Benzene, 1,1'-oxybis- Vapor.</td>
<td>STEL</td>
<td>2 ppm</td>
<td>US. ACGIH Threshold Limit Values (03 2018)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1 ppm</td>
<td>US. ACGIH Threshold Limit Values (03 2018)</td>
</tr>
<tr>
<td></td>
<td>PEL</td>
<td>1 ppm</td>
<td>US. OSHA Table Z-Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td></td>
<td>TWA PEL</td>
<td>1 ppm</td>
<td>US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)</td>
</tr>
<tr>
<td></td>
<td>REL</td>
<td>1 ppm</td>
<td>US. NIOSH: Pocket Guide to Chemical Hazards (2005)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1 ppm</td>
<td>US. OSHA Table Z-1-A (29 CFR 1910.1000) (11 2016)</td>
</tr>
<tr>
<td>Benzene, 1,1'-oxybis- Vapor.</td>
<td>ST ESL</td>
<td>70 µg/m³</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td></td>
<td>AN ESL</td>
<td>7 µg/m³</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td>Benzene, 1,1'-oxybis- Vapor.</td>
<td>TWA</td>
<td>1 ppm</td>
<td>US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)</td>
</tr>
<tr>
<td>Benzene, 1,1'-oxybis- Vapor.</td>
<td>ST ESL</td>
<td>10 ppb</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td></td>
<td>AN ESL</td>
<td>1 ppb</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td>Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>US. OSHA Table Z-1-A (29 CFR 1910.1000) (11 2016)</td>
</tr>
<tr>
<td>TWA</td>
<td>10 mg/m³</td>
<td>US. Tennessee. OELs. Occupational Exposure Limits. Table Z1A (06 2008)</td>
<td></td>
</tr>
<tr>
<td>Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- - Inhalable fraction and vapor.</td>
<td>TWA</td>
<td>2 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (2008)</td>
</tr>
<tr>
<td>Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-</td>
<td>REL</td>
<td>10 mg/m³</td>
<td>US. NIOSH: Pocket Guide to Chemical Hazards (2005)</td>
</tr>
<tr>
<td>TWA PEL</td>
<td>10 mg/m³</td>
<td>US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)</td>
<td></td>
</tr>
</tbody>
</table>

### Biological Limit Values

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol (acetone: Sampling time: End of shift at end of work week.)</td>
<td>40 mg/l (Urine)</td>
<td>ACGIH BEL (03 2013)</td>
</tr>
<tr>
<td>Ethanol, 2-butoxy- (Butoxyacetic acid (BAA), with hydrolysis: Sampling time: End of shift.)</td>
<td>200 mg/g (Creatinine in urine)</td>
<td>ACGIH BEL (03 2013)</td>
</tr>
</tbody>
</table>

### Appropriate Engineering Controls

No data available.

**Individual protection measures, such as personal protective equipment**
General information: Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin Protection
Hand Protection: No data available.

Other: No data available.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

Hygiene measures: Avoid contact with eyes. Observe good industrial hygiene practices. When using do not smoke.

### 9. Physical and chemical properties

**Appearance**

- **Physical state:** liquid
- **Form:** Spray Aerosol
- **Color:** No data available.
- **Odor:** No data available.
- **Odor threshold:** No data available.
- **pH:** No data available.
- **Melting point/freezing point:** No data available.
- **Initial boiling point and boiling range:** No data available.
- **Flash Point:** -104.44 °C
- **Evaporation rate:** No data available.
- **Flammability (solid, gas):** No data available.

**Upper/lower limit on flammability or explosive limits**

- **Flammability limit - upper (%):** No data available.
- **Flammability limit - lower (%):** No data available.
- **Explosive limit - upper (%):** No data available.
- **Explosive limit - lower (%):** No data available.

**Vapor pressure:** 3,447.3786 - 4,826.3301 hPa (20 °C)

**Vapor density:** No data available.

**Density:** No data available.

**Relative density:** No data available.

**Solubility(ies)**

- **Solubility in water:** No data available.
- **Solubility (other):** No data available.

**Partition coefficient (n-octanol/water):** No data available.
Auto-ignition temperature: No data available.
Decomposition temperature: No data available.
Viscosity: No data available.

10. Stability and reactivity

Reactivity: No data available.
Chemical Stability: Material is stable under normal conditions.
Possibility of hazardous reactions: No data available.
Conditions to avoid: Avoid heat or contamination.
Incompatible Materials: No data available.
Hazardous Decomposition Products: No data available.

11. Toxicological information

Information on likely routes of exposure
Inhalation: No data available.
Skin Contact: No data available.
Eye contact: No data available.
Ingestion: No data available.

Symptoms related to the physical, chemical and toxicological characteristics
Inhalation: No data available.
Skin Contact: No data available.
Eye contact: No data available.
Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)
Oral Product: ATEmix: 21,158.42 mg/kg
Dermal Product: Not classified for acute toxicity based on available data.
Specified substance(s):
- Ethanol, 2-((2-butoxyethoxy)-
LD 50 (Rabbit): 2,764 mg/kg
- 2-Propanol
LD 50: > 2,000 mg/kg
Alcohols, C12-14-
secondary, ethoxylated
LD 50: > 2,000 mg/kg

**Inhalation**

**Product:** Not classified for acute toxicity based on available data.

**Specified substance(s):**
- Ethanol, 2-(2-
  butoxyethoxy)-
  LC 50 (Various): > 20 mg/l
- Butane
  LC 50 (Mouse): 1,237 mg/l
- 2-Propanol
  LC 50: > 5 mg/l
  LC 50: > 20 mg/l
- Alcohols, C12-14-
  secondary, ethoxylated
  LC 50: > 5 mg/l
  LC 50: > 20 mg/l
- Propane
  LC 50 (Mouse): 1,237 mg/l

**Repeated dose toxicity**

**Product:** No data available.

**Specified substance(s):**
- Ethanol, 2-(2-
  butoxyethoxy)-
  NOAEL (Rat(Female, Male), Oral, 90 d): 250 mg/kg Oral Experimental result, Key study
  NOAEL (Rat(Female, Male), Dermal, 13 Weeks): > 2,000 mg/kg Dermal Experimental result, Key study
  NOAEL (Rat(Female, Male), Inhalation, 90 - 120 d): 14 ppm(m) Inhalation Experimental result, Key study
- Butane
  NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study
  LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study
- 2-Propanol
  NOAEL (Rat, Inhalation, >= 104 Weeks): 5,000 ppm(m) Inhalation Experimental result, Key study
- Propane
  NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study
  LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study

**Skin Corrosion/Irritation**

**Product:** No data available.

**Specified substance(s):**
- Ethanol, 2-(2-
  butoxyethoxy)-
  in vivo (Rabbit): Not irritant Experimental result, Supporting study
- 2-Propanol
  in vivo (Rabbit): Not Classified Experimental result, Key study

**Serious Eye Damage/Eye Irritation**

**Product:** No data available.

**Specified substance(s):**

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Ethanol, 2-(2-butoxyethoxy)-  
Rabbit, 24 - 72 hrs: Highly irritating
2-Propanol  
Rabbit, 1 d: Irritating.

**Respiratory or Skin Sensitization**

**Product:** No data available.

**Specified substance(s):**
- Ethanol, 2-(2-butoxyethoxy)-  
  Skin sensitization; in vivo (Guinea pig): Non sensitising
- 2-Propanol  
  Skin sensitization; in vivo (Guinea pig): Non sensitising

**Carcinogenicity**

**Product:** No data available.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**
No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**
No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**
No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro**

**Product:** No data available.

**In vivo**

**Product:** No data available.

**Reproductive toxicity**

**Product:** No data available.

**Specific Target Organ Toxicity - Single Exposure**

**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

**Aspiration Hazard**

**Product:** No data available.

**Other effects:** No data available.

12. Ecological information

**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish**

**Product:** No data available.
Specified substance(s):
Ethanol, 2-(2-butoxyethoxy)-
  LC 50 (Lepomis macrochirus, 96 h): 1,300 mg/l Experimental result, Key study
  LC 50 (Pimephales promelas, 96 h): 2,400 mg/l Experimental result, Supporting study
Butane
  LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
2-Propanol
  LC 50 (Pimephales promelas, 96 h): 9,640 mg/l Experimental result, Key study
Propane
  LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study

Aquatic Invertebrates
Product: No data available.

Specified substance(s):
Ethanol, 2-(2-butoxyethoxy)-
  LC 50 (Daphnia magna, 48 h): +/- 1,743 mg/l QSAR QSAR, Supporting study
Butane
  LC 50 (Daphnia sp., 48 h): 69.43 mg/l QSAR QSAR, Key study
2-Propanol
  LC 50 (Daphnia magna, 24 h): > 10,000 mg/l Experimental result, Key study

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: No data available.

Persistence and Degradability

Biodegradation
Product: No data available.

Specified substance(s):
Ethanol, 2-(2-butoxyethoxy)-
  85 % (28 d) Detected in water. Experimental result, Key study
Butane
  100 % (385.5 h) Detected in water. Experimental result, Key study
  50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study
2-Propanol
  53 % (5 d) Detected in water. Experimental result, Key study
Propane
  100 % (385.5 h) Detected in water. Experimental result, Key study
  50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study

BOD/COD Ratio
Product: No data available.

Bioaccumulative potential
Bioconcentration Factor (BCF)
Product: No data available.
Partition Coefficient n-octanol / water (log Kow)
Product: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments
- Ethanol, 2-(2-butoxyethoxy)-: No data available.
- Butane: No data available.
- 2-Propanol: No data available.
- Alcohols, C12-14-sec, ethoxylated: No data available.
- Propane: No data available.

Other adverse effects: No data available.

13. Disposal considerations

Disposal instructions: Wash before disposal. Dispose to controlled facilities.

Contaminated Packaging: No data available.

14. Transport information

DOT
- UN Number: UN 1950
- UN Proper Shipping Name: Aerosols, flammable
- Transport Hazard Class(es): 2.1
  - Class:
  - Label(s):
  - Packing Group: II
- Marine Pollutant: No
- Environmental Hazards: No
- Special precautions for user: Not regulated.

IMDG
- UN Number: UN 1950
- UN Proper Shipping Name: Aerosols, flammable
- Transport Hazard Class(es): 2
  - Class:
  - Label(s):
  - EmS No.:
  - Packing Group: –
- Environmental Hazards: No
- Marine Pollutant: No
- Special precautions for user: Not regulated.

IATA
- UN Number: UN 1950
- Proper Shipping Name: Aerosols, flammable
- Transport Hazard Class(es):
Class: 2.1  
Label(s): –  
Packing Group: –  
Environmental Hazards: No  
Marine Pollutant: No  
Special precautions for user: Not regulated.

15. Regulatory information

US Federal Regulations

Restrictions on use: Not known.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>2-Propanol</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>Propane</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>Ammonium hydroxide ((NH4)(OH))</td>
<td>lbs. 1000</td>
</tr>
</tbody>
</table>

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
- Fire Hazard
- Immediate (Acute) Health Hazards
- Flammable aerosol
- Serious Eye Damage/Eye Irritation

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol, 2-(2-butoxyethoxy)-</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>Butane</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>2-Propanol</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>Propane</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>Ethanol, 2-butoxy-</td>
<td>lbs. 1000</td>
</tr>
<tr>
<td>Ethanol, 2-(2-ethoxyethoxy)-</td>
<td>lbs. 1000</td>
</tr>
<tr>
<td>Ammonium hydroxide ((NH4)(OH))</td>
<td>lbs. 1000</td>
</tr>
<tr>
<td>Cedrene</td>
<td></td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous Chemical

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Threshold Planning Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol, 2-(2-butoxyethoxy)-</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Butane</td>
<td>10000 lbs</td>
</tr>
</tbody>
</table>

SDS_US - RE1000000610
2-Propanol 10000 lbs
Alcohols, C12-14-
secondary, ethoxylated
Propane 10000 lbs
Ethanol, 2-butoxy-
Ammonium hydroxide
((NH4)(OH))
Acetic acid, phenylmethyl
ester
Benzene, 1,1'-oxybis-
Phenol, 2,6-bis(1,1-
dimethylethyl)-4-methyl-

SARA 313 (TRI Reporting)

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reporting threshold for other users</th>
<th>Reporting threshold for manufacturing and processing</th>
</tr>
</thead>
</table>
| Ethanol, 2-(2-
butoxyethoxy)-    | N230 lbs                            | N230 lbs.                                           |
| 2-Propanol        | lbs                                 | lbs.                                                |

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)
US State Regulations

**US. California Proposition 65**
This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Methanone, diphenyl- Carcinogenic. 07 2012

**US. New Jersey Worker and Community Right-to-Know Act**

**Chemical Identity**
Ethanol, 2-(2-butoxyethoxy)-
Butane
2-Propanol
Propane

**US. Massachusetts RTK - Substance List**
No ingredient regulated by MA Right-to-Know Law present.

**US. Pennsylvania RTK - Hazardous Substances**

**Chemical Identity**
Ethanol, 2-(2-butoxyethoxy)-
Butane
2-Propanol
Propane

**US. Rhode Island RTK**
No ingredient regulated by RI Right-to-Know Law present.

International regulations

**Montreal protocol**
Not applicable

**Stockholm convention**
Not applicable
Rotterdam convention
Not applicable

Kyoto protocol
Not applicable

Inventory Status:
Australia AICS: Not in compliance with the inventory.
Canada DSL Inventory List: Not in compliance with the inventory.
EINECS, ELINCS or NLP: Not in compliance with the inventory.
Japan (ENCS) List: Not in compliance with the inventory.
China Inv. Existing Chemical Substances: Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI): Not in compliance with the inventory.
Canada NDSL Inventory: Not in compliance with the inventory.
Philippines PICCS: Not in compliance with the inventory.
US TSCA Inventory: On or in compliance with the inventory.
New Zealand Inventory of Chemicals: Not in compliance with the inventory.
Japan ISHL Listing: Not in compliance with the inventory.
Japan Pharmacopoeia Listing: Not in compliance with the inventory.
Mexico INSQ: Not in compliance with the inventory.
Ontario Inventory: Not in compliance with the inventory.
Taiwan Chemical Substance Inventory: Not in compliance with the inventory.

16. Other information, including date of preparation or last revision

Issue Date: 08/05/2019
Revision Information: No data available.
Version #: 1.0
Further Information: No data available.
Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.