SAFETY DATA SHEET

1. Identification

Product identifier: GLEME GLASS CLEANER

Other means of identification
SDS number: RE1000000074

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

Manufacturer/Importer/Distributor Information

Manufacturer
Company Name: CLAIRE MANUFACTURING COMPANY
Address: 1000 Integram 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
  Gases under pressure
  Compressed gas

Label Elements

Hazard Symbol:

Signal Word: Warning

Hazard Statement: Contains gas under pressure; may explode if heated.

Precautionary Statements

Storage: Protect from sunlight. Store in a well-ventilated place.

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</td>
<td>64-17-5</td>
<td>1 - &lt;5%</td>
</tr>
<tr>
<td>Ethanol, 2-butoxy-</td>
<td>111-76-2</td>
<td>1 - &lt;5%</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>1 - &lt;5%</td>
</tr>
<tr>
<td>Butane</td>
<td>106-97-8</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: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/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. Stop flow of gas. 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: Pressurized container may explode when exposed to heat or flame.

Special protective equipment and precautions for firefighters

Special firefighting 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:
No data available.

Methods and material for containment and cleaning up:
Stop the flow of material, if this is without risk. Absorb with sand or other inert absorbent.

Environmental Precautions:
Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

7. Handling and storage

Precautions for safe handling:
Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities:
Protect from sunlight. Store in a cool place. Aerosol Level 1

8. Exposure controls/personal protection

Control Parameters

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>REL</td>
<td>1,000 ppm 1,900 mg/m³</td>
<td>US. NIOSH: Pocket Guide to Chemical Hazards (2005)</td>
</tr>
<tr>
<td></td>
<td>PEL</td>
<td>1,000 ppm 1,900 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</td>
<td>1,000 ppm 1,900 mg/m³</td>
<td>US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>1,000 ppm</td>
<td>US. ACGIH Threshold Limit Values (2009)</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) (1989)</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>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</td>
<td>1,000 ppm 1,800 mg/m³</td>
<td>US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)</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>STEL</td>
<td>1,000 ppm</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-1-A (29 CFR 1910.1000) (1989)</td>
</tr>
<tr>
<td>2-Propanol, 2-methyl-</td>
<td>STEL</td>
<td>150 ppm 450 mg/m³</td>
<td>US. NIOSH: Pocket Guide to Chemical Hazards (2005)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>100 ppm 300 mg/m³</td>
<td>US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)</td>
</tr>
<tr>
<td></td>
<td>PEL</td>
<td>100 ppm 300 mg/m³</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td>Chemical Identity</td>
<td>Exposure Limit Values</td>
<td>Source</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>Acetic acid, phenylmethyl ester</td>
<td>TWA 10 ppm</td>
<td>US. ACGIH Threshold Limit Values (2008)</td>
<td></td>
</tr>
<tr>
<td>1,2-Benzenedicarboxylic acid, 1,2-diethyl ester</td>
<td>REL 5 mg/m3</td>
<td>US. NIOSH: Pocket Guide to Chemical Hazards (2005)</td>
<td></td>
</tr>
<tr>
<td>TWA 5 mg/m3</td>
<td>US. ACGIH Threshold Limit Values (2008)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benzene, 1,1'-oxybis- - Vapor.</td>
<td>STEL 2 ppm</td>
<td>US. ACGIH Threshold Limit Values (03 2018)</td>
<td></td>
</tr>
<tr>
<td>TWA 1 ppm</td>
<td>US. ACGIH Threshold Limit Values (03 2018)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEL 1 ppm 7 mg/m3</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REL 1 ppm 7 mg/m3</td>
<td>US. NIOSH: Pocket Guide to Chemical Hazards (2005)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TWA 1 ppm 7 mg/m3</td>
<td>US. OSHA Table Z-1-A (29 CFR 1910.1000) (02 2006)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethanolone, 1-phenyl-</td>
<td>TWA 10 ppm 50 mg/m3</td>
<td>US. OARS. WEELs Workplace Environmental Exposure Level Guide (2007)</td>
<td></td>
</tr>
<tr>
<td>TWA 10 ppm</td>
<td>US. ACGIH Threshold Limit Values (2008)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stoddard solvent</td>
<td>TWA 100 ppm</td>
<td>US. ACGIH Threshold Limit Values (2008)</td>
<td></td>
</tr>
<tr>
<td>REL 350 mg/m3</td>
<td>US. NIOSH: Pocket Guide to Chemical Hazards (2005)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEL 500 ppm 2,900 mg/m3</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ceiling Time 1,800 mg/m3</td>
<td>US. NIOSH: Pocket Guide to Chemical Hazards (2005)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TWA 100 ppm 525 mg/m3</td>
<td>US. OSHA Table Z-1-A (29 CFR 1910.1000) (02 2006)</td>
<td></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>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:** Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection:** Wear goggles/face shield.

**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:** Observe good industrial hygiene practices.
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: 9.1 - 10.1
- Melting point/freezing point: No data available.
- Initial boiling point and boiling range: Estimated 100 °C
- Flash Point: No data available.
- Evaporation rate: No data available.
- Flammability (solid, gas): Non-flammable Aerosol

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: 551 - 689 kPa (21 °C)
- Vapor density: No data available.
- Density: 0.97 g/cm³
- 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: 60,310.88 mg/kg

Dermal
Product: ATEmix: 23,039.72 mg/kg

Inhalation
Product: ATEmix: 690.85 mg/l
ATEmix: 172.71 mg/l

Repeated dose toxicity
Product: No data available.

Skin Corrosion/Irritation
Product: No data available.

Serious Eye Damage/Eye Irritation
Product: No data available.

Respiratory or Skin Sensitization
Product: No data available.

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

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.

Aquatic Invertebrates
Product: No data available.

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.

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
No data available.
Ethanol, 2-butoxy-
No data available.
Propane  No data available.
Butane  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, non-flammable
Transport Hazard Class(es)
  Class:  2.2
  Label(s):  –
Packing Group:  II
Marine Pollutant:  No
Environmental Hazards:  No
Marine Pollutant:  No
Special precautions for user:  Not regulated.

IMDG

UN Number:  UN 1950
UN Proper Shipping Name:  Aerosols, non-flammable
Transport Hazard Class(es)
  Class:  2
  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, non-flammable
Transport Hazard Class(es)
  Class:  2.2
  Label(s):  –
Packing Group:  –
Environmental Hazards:  No
Marine Pollutant:  No
Special precautions for user:  Not regulated.
  Cargo aircraft only:  Allowed.

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>Ethanol</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>Propane</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>Butane</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>2-Propanol, 2-methyl-</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>1,3-Benzodioxole, 5-(2-propen-1-yl)-</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>1,2-Benzenedicarboxylic acid, 1,2-diethyl ester</td>
<td>lbs. 1000</td>
</tr>
<tr>
<td>Ethanone, 1-phenyl-</td>
<td>lbs. 5000</td>
</tr>
</tbody>
</table>

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Not listed.

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</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>Ethanol, 2-butoxy-</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>Propane</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>Butane</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>2-Propanol, 2-methyl-</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>1,3-Benzodioxole, 5-(2-propen-1-yl)-</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>1,2-Benzenedicarboxylic acid, 1,2-diethyl ester</td>
<td>lbs. 1000</td>
</tr>
<tr>
<td>Ethanone, 1-phenyl-</td>
<td>lbs. 5000</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</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Ethanol, 2-butoxy-</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Propane</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Butane</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>2-Propanol, 2-methyl-</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Acetic acid, phenylmethyl ester</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>1,2-Benzenedicarboxylic acid, 1,2-diethyl ester</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Benzene, 1,1'-oxybis-</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Ethanone, 1-phenyl-</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Stoddard solvent</td>
<td>10000 lbs</td>
</tr>
</tbody>
</table>

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>
<tbody>
<tr>
<td>Ethanol, 2-butoxy-</td>
<td>N230 lbs</td>
<td>N230 lbs</td>
</tr>
</tbody>
</table>

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
No ingredient requiring a warning under CA Prop 65.

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

Chemical Identity
Ethanol
Ethanol, 2-butoxy-
Propane
Butane

**US. Massachusetts RTK - Substance List**

**Chemical Identity**
1,3-Benzodioxole, 5-(2-propen-1-yl)-

**US. Pennsylvania RTK - Hazardous Substances**

**Chemical Identity**
Ethanol
Ethanol, 2-butoxy-
Propane
Butane

**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:**
On or in compliance with the inventory

**EINECS, ELINCS or NLP:**
On or in compliance with the inventory

**Japan (ENCS) List:**
Not in compliance with the inventory.

**China Inv. Existing Chemical Substances:**
On or 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

**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.

**Canada DSL Inventory List:**
Not in compliance with the inventory.

**Korea Existing Chemicals Inv. (KECI):**
On or in compliance with the inventory

**New Zealand Inventory of Chemicals:**
On or in compliance with the inventory
Ontario Inventory: On or in compliance with the inventory
Taiwan Chemical Substance Inventory: On or in compliance with the inventory

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

<table>
<thead>
<tr>
<th>Issue Date:</th>
<th>09/19/2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision Information:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Version #:</td>
<td>1.0</td>
</tr>
<tr>
<td>Further Information:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Disclaimer:</td>
<td>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.</td>
</tr>
</tbody>
</table>