1. Product and Company Identification

Product name: Gleme Glass Cleaner Wipes
Product #: 933        Revision date: 04-Oct-2010    Print date: 04-Oct-2010

Effective date: 04-Oct-2010
Company information: Claire Manufacturing Co.
500 Vista Ave.
Addison, IL 60101 United States
General Assistance 630-543-7600

Company phone: General Assistance 630-543-7600
Emergency telephone US: 800-424-9300
Emergency telephone outside US: 703-527-3887
Version #: 04
Supersedes date: 31-Mar-2010

2. Hazards Identification

Emergency overview: Will be easily ignited by heat, spark or flames. Prolonged exposure may cause chronic effects.

Potential health effects:
- **Eyes**: Contact with eyes may cause irritation.
- **Skin**: This product may be harmful if it is absorbed through the skin.
- **Inhalation**: Intentional misuse by concentrating and inhaling the product can be harmful or fatal.
- **Ingestion**: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Target organs: 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged and may cause blood damage. These effects have not been observed in humans. Blood. Central nervous system. Kidney. Liver. Respiratory system.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>1 - 3</td>
</tr>
<tr>
<td>Ethyl Alcohol</td>
<td>64-17-5</td>
<td>1 - 3</td>
</tr>
</tbody>
</table>

Non-hazardous and other components below reportable levels: > 90

4. First Aid Measures

First aid procedures:
- **Eye contact**: Flush eyes with water as a precaution. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Get medical attention if irritation develops or persists.
- **Skin contact**: Wash off with soap and water. Get medical attention if irritation develops or persists.
- **Inhalation**: Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or Poison Control Center immediately.
- **Ingestion**: Have victim rinse mouth thoroughly with water. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. If ingestion of a large amount does occur, seek medical attention.

5. Fire Fighting Measures

Flammable properties: Runoff to sewer may cause fire or explosion hazard.
Extinguishing media

Suitable extinguishing media

- Large Fires: Water. Water spray, fog or regular foam.
- Small Fires: Dry chemical, CO2, water spray or regular foam.

Protection of firefighters

Protective equipment and precautions for firefighters

In the event of fire and/or explosion do not breathe fumes. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Cool containers with flooding quantities of water until well after fire is out.

6. Accidental Release Measures

Methods for containment
Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up
Large Spills: Dike far ahead of liquid spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly. After removal flush contaminated area thoroughly with water. Never return spills in original containers for re-use.

7. Handling and Storage

Handling
Do not handle or store near an open flame, heat or other sources of ignition. Use only in area provided with appropriate exhaust ventilation. Avoid prolonged exposure.

Storage
The pressure in sealed containers can increase under the influence of heat. Keep away from heat and sources of ignition. Store in cool place. Keep the container dry. Keep in an area equipped with sprinklers.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>TWA</th>
<th>STEL</th>
<th>Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>20 ppm</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>Ethyl Alcohol</td>
<td>64-17-5</td>
<td>1000 ppm</td>
<td>1000 ppm</td>
<td>Not established</td>
</tr>
</tbody>
</table>

OSHA

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>TWA</th>
<th>STEL</th>
<th>Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>50 ppm</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>Ethyl Alcohol</td>
<td>64-17-5</td>
<td>1000 ppm</td>
<td>Not established</td>
<td>Not established</td>
</tr>
</tbody>
</table>

Personal protective equipment

- Eye / face protection: Not normally needed.
- Skin protection: Wear appropriate chemical resistant gloves.
- Respiratory protection: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

9. Physical & Chemical Properties

Appearance: Sheets.
Boiling point: 213.8 °F (101.1 °C) estimated
Color: White.
Flash back: No
Flash point: >200F
Form: Liquid saturated on wipe.
Odor: Butyl
pH: 9 - 10
Physical state: Not available
Pressure: Not applicable
Solubility: Partially
Specific gravity: Unknown

10. Chemical Stability & Reactivity Information

Chemical stability: Stable at normal conditions. Risk of ignition.
Conditions to avoid: Heat, flames and sparks.
Incompatible materials: None known.
Hazardous decomposition products: May include oxides of nitrogen.

11. Toxicological Information

Acute effects:
- Acute LD50: 8992 mg/kg estimated, Rat, Dermal
- Acute LC50: 89 mg/l/4h estimated, Rat, Inhalation

Component analysis - LD50

<table>
<thead>
<tr>
<th>Chemical</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol</td>
<td>Oral LD50 Rat 7080 mg/kg</td>
</tr>
<tr>
<td>Ethyl Alcohol</td>
<td>Oral LD50 Rat 2270 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Dermal LD50 Rabbit 220 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Dermal LD50 Rat 450 ppm 4 h</td>
</tr>
<tr>
<td></td>
<td>Inhalation LC50 Rat 4.21 mg/L 4 h</td>
</tr>
</tbody>
</table>

Sensitization: Not expected to be hazardous by OSHA criteria.
Carcinogenicity:
- IARC - Group 1 (Carcinogenic to Humans)
  - Ethyl Alcohol: Monograph 96 [in preparation] (in alcoholic beverages)
Reproductive effects: Possible reproductive hazard.
Teratogenicity: Not expected to be hazardous by OSHA criteria.

12. Ecological Information

Ecotoxicity:
- LC50 45942 mg/L estimated, Fish, 96.00 Hours,
- EC50 36680 mg/L estimated, Daphnia, 48.00 Hours,
- IC50 19531 mg/L estimated, Algae, 72.00 Hours,

Components of this product have been identified as having potential environmental concerns.

13. Disposal Considerations

Disposal instructions:
Consult authorities before disposal. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements: Not Regulated

15. Regulatory Information

US federal regulations:
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Mass Balance % of De minimis Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol</td>
<td>1.0 % of de minimis concentration (applies to R-(OCH2CH2)n-OR', where n = 1,2, or 3, R=alkyl C7 or less, or R = phenyl or alkyl substituted phenyl, R' = H or alkyl C7 or less, or OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate, Chemical Category N230)</td>
</tr>
</tbody>
</table>
Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical

Yes

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 302 extremely hazardous substance

No

Section 311 hazardous chemical

Yes

Hazard categories (311/312)

Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

Inventory status

Country(s) or region Inventory name On inventory (yes/no)*
China Inventory of Existing Chemical Substances in China (IECSC) Yes
Europe European Inventory of New and Existing Chemicals (EINECS) Yes
Europe European List of Notified Chemical Substances (ELINCS) Yes
Japan Inventory of Existing and New Chemical Substances (ENCS) Yes
Korea Existing Chemicals List (ECL) Yes
United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes

* A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

U.S. - Pennsylvania - RTK (Right to Know) List

2-Butoxyethanol 111-76-2 Present
Ethyl Alcohol 64-17-5 Present

Further information

HMIS® ratings

Health: 1*
Flammability: 1
Physical hazard: 0

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

MSDS sections updated

Handling and Storage: Storage
Transport Information: Agency Name and Packaging Type/Transport Mode Selection

Prepared by

Regulatory Compliance

Product name: Gleme Glass Cleaner Wipes
Product #: 933
Revision date: 04-OCT-2010
Print date: 04-OCT-2010

16. Other Information

HMIS Trademark Statement

Health: 1*
Flammability: 1
Physical hazard: 0