1. Product and Company Identification

Product number: 824-002  
Product name: Heavy Duty Foaming Oven Cleaner  
Effective date: 08-Sep-2011  
Company information: Claire Mfg.  
1005 Westgate  
Addison, IL 60101 United States  
Company phone: General Assistance 630-543-7600  
Emergency telephone US: 800-424-9300  
Emergency telephone outside US: 703-527-3887  
Version #: 10  
Supersedes date: 17-Aug-2010

2. Hazards Identification

Emergency overview: Aerosol. CONTENTS UNDER PRESSURE. May be ignited by heat, sparks or flames. 
Corrosive. Causes skin and eye burns. Irritating to respiratory system. Prolonged exposure may cause chronic effects.

Potential health effects:

Routes of exposure: Skin contact. Eye contact. Inhalation. Ingestion.

Eyes: This product causes eye burns. Risk of serious damage to eyes.

Skin: Causes skin burns.

Inhalation: Intentional misuse by concentrating and inhaling the product can be harmful or fatal. 
Causes burns. Irritating to respiratory system. Prolonged inhalation may be harmful.

Ingestion: Exposure by ingestion of an aerosol is unlikely. Ingestion may produce burns to the lips, 
oral cavity, upper airway, esophagus and possibly the digestive tract. May cause delayed lung damage. Components of the product may be absorbed into the body by ingestion.

Target organs: Central nervous system. Lungs.

Chronic effects: May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. 
May cause delayed lung damage.

Signs and symptoms: Discomfort in the chest. Narcosis.

3. Composition / Information on Ingredients

Components:  
<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>5 - 8</td>
</tr>
<tr>
<td>n-Butane</td>
<td>106-97-8</td>
<td>1 - 3</td>
</tr>
<tr>
<td>Diethylene Glycol Monobutyl Ether</td>
<td>112-34-5</td>
<td>1 - 3</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>1 - 3</td>
</tr>
</tbody>
</table>

Non-hazardous and other components below reportable levels: 80 - 90

4. First Aid Measures

First aid procedures:

**Eye contact**: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

**Skin contact**: Immediately flush skin with plenty of water. Remove and isolate contaminated clothing and shoes. Get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.

**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. Get medical attention immediately.
Ingestion

If material is ingested, immediately contact a poison control center. Have victim rinse mouth thoroughly with water. Do not induce vomiting without advice from poison control center. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to physician

In case of shortness of breath, give oxygen. Keep victim warm. Symptoms may be delayed.

5. Fire Fighting Measures

Flammable properties

Runoff to sewer may cause fire or explosion hazard.

Extinguishing media


Protection of firefighters

Specific hazards arising from the chemical: Fire may produce irritating, corrosive and/or toxic gases.

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. Containers should be cooled with water to prevent vapor pressure build up. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

6. Accidental Release Measures

Methods for containment

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up

Should not be released into the environment. 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.

7. Handling and Storage

Handling

Pressurized container: Do not pierce or burn, even after use. Do not handle or store near an open flame, heat or other sources of ignition. Do not smoke while using or until sprayed surface is thoroughly dry. Do not use if spray button is missing or defective. Use only with adequate ventilation. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not get this material on clothing. Avoid prolonged exposure.

Storage

Level 1 Aerosol. Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Keep away from heat and flame. Avoid exposure to long periods of sunlight. Store in cool place. Keep the container dry. Keep out of the reach of children. Do not store, incinerate, or heat this material above 120 degrees Fahrenheit.

8. Exposure Controls / Personal Protection

Exposure limits

<table>
<thead>
<tr>
<th>ACGIH</th>
<th>Components</th>
<th>CAS #</th>
<th>TWA</th>
<th>STEL</th>
<th>Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>Not established</td>
<td>Not established</td>
<td>2 mg/m3</td>
</tr>
<tr>
<td></td>
<td>n-Butane</td>
<td>106-97-8</td>
<td>1000 ppm</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Diethylene Glycol Monobutyl Ether</td>
<td>112-34-5</td>
<td>20 ppm</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Propane</td>
<td>74-98-6</td>
<td>1000 ppm</td>
<td>Not established</td>
<td>Not established</td>
</tr>
</tbody>
</table>
OSHA

Components | CAS # | TWA | STEL | Ceiling |
--- | --- | --- | --- | --- |
Sodium Hydroxide | 1310-73-2 | 2 mg/m3 | Not established | Not established |
Diethylene Glycol Monobutyl Ether | 112-34-5 | 100 ppm | Not established | Not established |
Propane | 74-98-6 | 1000 ppm | Not established | Not established |

Personal protective equipment

Eye / face protection
Wear chemical goggles.

Skin protection
Do not get this material on clothing. Protective gloves. Wear appropriate chemical resistant clothing. Structural firefighters protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations. Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent).

Respiratory protection
Wear positive pressure self-contained breathing apparatus (SCBA). If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

9. Physical & Chemical Properties

Appearance
Compressed liquefied gas.

Boiling point
366.8 °F (186.1 °C) estimated

Color
Clear.

Density
1.0299 g/cm3 estimated

Flammability (HOC)
3.4223 kJ/g estimated

Flash back
No

Flash point
-156 °F (-104.4 °C)

Form
Aerosol.

Freezing point
Not available

Odor
Characteristic.

pH
13 - 14

Physical state
Liquid.

Pressure
50 - 60 psig @ 70F

Solubility
Completely

Specific gravity
1.03

10. Chemical Stability & Reactivity Information

Chemical stability
Risk of ignition. Instability caused by elevated temperatures. May form explosive peroxides.

Conditions to avoid
Heat, flames and sparks.

Hazardous decomposition products
Irritants. Toxic gas.

11. Toxicological Information

Acute effects
Acute LD50: 16158 mg/kg estimated, Rat, Dermal Causes burns.

Component analysis - LD50

Toxicology Data - Selected LD50s and LC50s

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene Glycol Monobutyl Ether</td>
<td>Oral LD50 Rat 3384 mg/kg; Dermal LD50 Rabbit 2700 mg/kg</td>
<td>Inhalation LC50 Rat 658 mg/L 4 h</td>
</tr>
<tr>
<td>n-Butane</td>
<td>106-97-8</td>
<td>Inhalation LC50 Rat 658 mg/L 4 h</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>Dermal LD50 Rabbit 1350 mg/kg</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>Not expected to be hazardous by OSHA criteria.</td>
</tr>
</tbody>
</table>

Teratogenicity
Not expected to be hazardous by OSHA criteria.

12. Ecological Information

Ecotoxicity
Components of this product are hazardous to aquatic life.

<table>
<thead>
<tr>
<th>LC50</th>
<th>EC50</th>
<th>IC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>615 mg/L estimated, Fish, 96.00 Hours</td>
<td>6541 mg/L estimated, Daphnia, 48.00 Hours</td>
<td>745 mg/L estimated, Algae, 72.00 Hours</td>
</tr>
</tbody>
</table>
Waste codes
D001: Waste Flammable material with a flash point <140 F
D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]

Disposal instructions
Contents under pressure. Dispose of this material and its container at hazardous or special waste collection point. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose in accordance with all applicable regulations.

13. Disposal Considerations

Department of Transportation (DOT) Requirements
Basic shipping requirements:
- Proper shipping name: Consumer commodity
- Hazard class: ORM-D
- Subsidiary hazard class: None

Additional information:
- Packaging exceptions: 156, 306
- Packaging non bulk: 156, 306
- Packaging bulk: None

IMDG
Basic shipping requirements:
- Proper shipping name: AEROSOLS
- Hazard class: 2.1
- Subsidiary hazard class: 8
- UN number: 1950

Additional information:
- Packaging exceptions: LTD QTY
- Item: 5FC
- Labels required: 2.1, 8
- Transport Category: If <1L: Consumer Commodity

IATA
Basic shipping requirements:
- Proper shipping name: Aerosols, flammable, containing substances in Class 8, Packing Group II
- Hazard class: 2.1
- Subsidiary hazard class: 8
- UN number: 1950

Additional information:
- Packaging exceptions: FORBIDDEN
- Labels required: Not Applicable

14. Transport Information

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
Diethylene Glycol Monobutyl Ether 112-34-5 1.0 % 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)

Occupational Safety and Health Administration (OSHA)
- 29 CFR 1910.1200 hazardous chemical: Yes

CERCLA (Superfund) reportable quantity
- Sodium Hydroxide: 1000.0000
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 - Yes
Reactivity Hazard - No

Inventory status

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

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Hazard Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene Glycol Monobutyl Ether</td>
<td>112-34-5</td>
<td>Environmental hazard</td>
</tr>
<tr>
<td>n-Butane</td>
<td>106-97-8</td>
<td>Present</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>Present</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>Environmental hazard</td>
</tr>
</tbody>
</table>

16. Other Information

Further information
HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings
Health: 3*
Flammability: 2
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
Transport Information: Agency Name and Packaging Type/Transport Mode Selection

Prepared by
Regulatory Compliance