



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product number** 824  
**Product name** Heavy Duty Foaming Oven Cleaner  
**Effective date** 20-Feb-2009  
**Company information** Claire Manufacturing  
500 Vista Ave.  
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 #** 07  
**Supersedes date** 31-Mar-2008

## 2. Hazards Identification

**Emergency overview** EXTREMELY FLAMMABLE  
CONTENTS UNDER PRESSURE. Aerosol. Pressurized container may explode when exposed to heat or flame. 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.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent
Sodium Hydroxide	1310-73-2	5 - 8
n-Butane	106-97-8	1 - 3
Diethylene Glycol Monobutyl Ether	112-34-5	1 - 3
Propane	74-98-6	1 - 3
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.

## 5. Fire Fighting Measures

<b>Flammable properties</b>	Containers may explode when heated. Runoff to sewer may cause fire or explosion hazard.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
<b>Protection of firefighters</b>	
<b>Specific hazards arising from the chemical</b>	Fire may produce irritating, corrosive and/or toxic gases.
<b>Protective equipment and precautions for firefighters</b>	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

<b>Methods for containment</b>	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.
<b>Methods for cleaning up</b>	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

<b>Handling</b>	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 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.
<b>Storage</b>	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

#### ACGIH

Components	CAS #	TWA	STEL	Ceiling
Sodium Hydroxide	1310-73-2	Not established	Not established	2 mg/m3
n-Butane	106-97-8	1000 ppm	Not established	Not established
Diethylene Glycol Monobutyl Ether	112-34-5	20 ppm	Not established	Not established
Propane	74-98-6	1000 ppm	Not established	Not established

**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. 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). Protective gloves. Wear chemical protective equipment that is specifically recommended by the manufacturer.

**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**

<b>Appearance</b>	Compressed liquefied gas.
<b>Boiling point</b>	366.8 °F (186.1 °C) estimated
<b>Color</b>	Clear.
<b>Flammability (HOC)</b>	3.4223 kJ/g estimated
<b>Flash back</b>	No
<b>Flash point</b>	-156 °F (-104.4 °C)
<b>Form</b>	Aerosol.
<b>Odor</b>	Characteristic.
<b>pH</b>	13 - 14
<b>Physical state</b>	Liquid.
<b>Pressure</b>	50 - 60 psig @ 70F
<b>Solubility</b>	Completely
<b>Specific gravity</b>	1.03

**10. Chemical Stability & Reactivity Information**

<b>Chemical stability</b>	Risk of ignition. Instability caused by elevated temperatures. May form explosive peroxides.
<b>Conditions to avoid</b>	Heat, flames and sparks.
<b>Hazardous decomposition products</b>	Irritants. Toxic gas. May include oxides of nitrogen.

**11. Toxicological Information**

<b>Acute effects</b>	Acute LD50: 16158 mg/kg estimated, Rat, Dermal Causes burns.
<b>Reproductive effects</b>	Not expected to be hazardous by OSHA criteria.
<b>Teratogenicity</b>	Not expected to be hazardous by OSHA criteria.

**12. Ecological Information**

<b>Ecotoxicity</b>	Components of this product are hazardous to aquatic life.  LC50 615 mg/L estimated, Fish, 96.00 Hours, EC50 2369 mg/L estimated, Daphnia, 48.00 Hours, IC50 745 mg/L estimated, Algae, 72.00 Hours,
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**13. Disposal Considerations**

<b>Waste codes</b>	D001: Waste Flammable material with a flash point <140 F D002: Waste Corrosive material [pH <=2 or >=12.5, or corrosive to steel]
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**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.

**14. Transport Information****Department of Transportation (DOT) Requirements****Basic shipping requirements:**

<b>Proper shipping name</b>	Consumer commodity
<b>Hazard class</b>	ORM-D
<b>Subsidiary hazard class</b>	None
<b>Additional information:</b>	
<b>Packaging exceptions</b>	156, 306
<b>Packaging non bulk</b>	156, 306
<b>Packaging bulk</b>	None

**IMDG****Basic shipping requirements:**

<b>Proper shipping name</b>	AEROSOLS, flammable, corrosive
<b>Hazard class</b>	2.1
<b>UN number</b>	1950
<b>Additional information:</b>	
<b>Packaging exceptions</b>	LTD QTY
<b>Item</b>	5FC
<b>Labels required</b>	None
<b>Transport Category</b>	1

**IATA****Basic shipping requirements:**

<b>Proper shipping name</b>	Aerosols, flammable, containing substances in Class 8, Packing Group II
<b>Hazard class</b>	2.1
<b>Subsidiary hazard class</b>	8
<b>UN number</b>	1950
<b>Additional information:</b>	
<b>Packaging exceptions</b>	FORBIDDEN
<b>Labels required</b>	Not Applicable

**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-(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>-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)**

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

Section 302 extremely hazardous substance No  
Section 311 hazardous chemical Yes

#### 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)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
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

Diethylene Glycol Monobutyl Ether	112-34-5	Environmental hazard
n-Butane	106-97-8	Present
Propane	74-98-6	Present
Sodium Hydroxide	1310-73-2	Environmental hazard

## 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

Hazards Identification: Emergency overview  
Handling and Storage: Storage  
Physical & Chemical Properties: Physical & Chemical Properties  
Transport Information: Agency Name and Packaging Type/Transport Mode Selection