



MATERIAL SAFETY DATA SHEET

4/25/08

1. Product and Company Identification

Product number 824
 Product name Heavy Duty Foaming Oven Cleaner
 Effective date 31-Mar-2008
 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 # 06
 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.

OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

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.

Potential environmental effects Components of this product are hazardous to aquatic life. May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Sodium Hydroxide	1310-73-2	5 - 8
n-Butane	106-97-8	3 - 5
Diethylene Glycol Monobutyl Ether	112-34-5	3 - 5
Propane	74-98-6	3 - 5
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.
General advice	If you feel unwell, seek medical advice (show the label where possible). In case of shortness of breath, give oxygen. Keep victim warm.

5. Fire Fighting Measures

Flammable properties	Containers may explode when heated. Runoff to sewer may cause fire or explosion hazard.
Extinguishing media	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
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.
Specific hazards	Fire may produce irritating, corrosive and/or toxic gases.

6. Accidental Release Measures

Personal precautions	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Keep unnecessary personnel away.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
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 reuse the empty container. 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 release to the environment. 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. Use care in handling/storage. 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

Engineering controls

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

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.

General hygiene considerations

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. When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	Compressed liquefied gas.
Color	Clear.
Odor	Characteristic.
Physical state	Gas.
Form	Aerosol.
Flash back	No
Pressure	50 - 60 psig @ 70F
Solubility	Completely
Flash point	-156 °F (-104.4 °C)
Boiling point	366.8 °F (186.1 °C) estimated
Specific gravity	1.025
pH	13 - 14

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. May include oxides of nitrogen.

11. Toxicological Information

Acute effects	Acute LD50: 16158 mg/kg estimated, Rat, Dermal Causes burns.
Local effects	Irritating to respiratory system.

Chronic effects	Hazardous by OSHA criteria. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged or repeated exposure may cause lung injury. Prolonged exposure may cause chronic effects.
Neurological effects	Hazardous by OSHA criteria.
Mutagenicity	Not expected to be hazardous by OSHA criteria.
Reproductive effects	Not expected to be hazardous by OSHA criteria.
Teratogenicity	Not expected to be hazardous by OSHA criteria.
Further information	Symptoms may be delayed.

12. Ecological Information

Ecotoxicity	Components of this product are hazardous to aquatic life. LC50 615 mg/L estimated, Fish, 96.00 Hours, EC50 2385 mg/L estimated, Daphnia, 48.00 Hours, IC50 745 mg/L estimated, Algae, 72.00 Hours,
Environmental effects	Harmful to aquatic life.

13. Disposal Considerations

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. Incinerate the material under controlled conditions in an approved incinerator. 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.
Contaminated packaging	Do not re-use empty containers.

14. Transport Information

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, flammable, corrosive
Hazard class	2.1
UN number	1950
Additional information:	
Packaging exceptions	LTD QTY
Item	5FC
Labels required	None
Transport Category	1



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	None



15. Regulatory Information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

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)

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

Prepared by Regulatory Compliance

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.

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MSDS sections updated This document has undergone significant changes and should be reviewed in its entirety.