



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 826-002
Product name **Grill & Oven Cleaner**
Effective date 25-Jan-2012
Company information Claire Mfg.
1005 Westgate
Addison, IL 60101 United States
Company phone 1-630-543-7600
Emergency telephone US 1-866-836-8855
Emergency telephone outside US 1-952-852-4646
Version # 10
Supersedes date 30-Jul-2010
Product use Oven cleaner

2. Hazards Identification

Emergency overview Aerosol. CONTENTS UNDER PRESSURE.
Causes skin and eye burns. Irritating to respiratory system. Prolonged exposure may cause chronic effects.

Potential health effects

Routes of exposure Eye contact. Skin contact. Ingestion.

Eyes Causes eye burns.

Skin Causes skin burns. May be harmful if absorbed through skin.

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. Harmful if swallowed. Ingestion causes burns of the upper digestive and respiratory tracts. May cause delayed lung damage. Components of the product may be absorbed into the body by ingestion.

Target organs Prolonged or repeated exposure may cause liver and kidney damage. These effects have not been observed in humans.

Central nervous system. Lungs.

Chronic effects May be harmful if absorbed through skin. 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 injury.

Signs and symptoms Discomfort in the chest. Narcosis. Coughing.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Diethylene Glycol Monobutyl Ether	112-34-5	8 - 10
Sodium Hydroxide	1310-73-2	5 - 8
Propane	74-98-6	1 - 3
n-Butane	106-97-8	1 - 3
Monoethanolamine	141-43-5	1 - 3
Non-hazardous and other components below reportable levels		60 - 80

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.

Inhalation If inhalation of gas/fume/vapor/dust/mist from the material is excessive (air concentration is greater than the TLV or health effects are noticed), immediately remove the affected person(s) to fresh air. Get medical attention if symptoms persist.

Ingestion In the unlikely event of swallowing contact a physician or poison control center. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

5. Fire Fighting Measures

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

Extinguishing media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Protection of firefighters

Protective equipment and precautions for firefighters In case of fire and/or explosion do not breathe fumes. Containers should be cooled with water to prevent vapor pressure build up.

6. Accidental Release Measures

Methods for containment Stop the flow of material, if this is without risk.

Methods for cleaning up Should not be released into the environment.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

7. Handling and Storage

Handling Pressurized container: Do not pierce or burn, even after use. Do not smoke while using or until sprayed surface is thoroughly dry. Use only in area provided with appropriate exhaust ventilation. Do not use if spray button is missing or defective. Do not re-use empty containers. Do not get this material in contact with skin. Avoid breathing dust/fume/gas/mist/vapors/spray. 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. Do not handle or store near an open flame, heat or other sources of ignition. Avoid exposure to long periods of sunlight. Store in cool place. Keep away from food, drink and animal feedingstuffs. Store at ambient temperature and atmospheric pressure.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH

Components	CAS #	TWA	STEL	Ceiling
Diethylene Glycol Monobutyl Ether	112-34-5	20 ppm	Not established	Not established
Sodium Hydroxide	1310-73-2	Not established	Not established	2 mg/m3
Propane	74-98-6	1000 ppm	Not established	Not established
n-Butane	106-97-8	1000 ppm	Not established	Not established
Monoethanolamine	141-43-5	3 ppm	6 ppm	Not established

OSHA

Components	CAS #	TWA	STEL	Ceiling
Diethylene Glycol Monobutyl Ether	112-34-5	100 ppm	Not established	Not established
Sodium Hydroxide	1310-73-2	2 mg/m3	Not established	Not established
Propane	74-98-6	1000 ppm	Not established	Not established
Monoethanolamine	141-43-5	3 ppm	Not established	Not established

Personal protective equipment**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).

Respiratory protection

Do not breathe dust/fume/gas/mist/vapors/spray. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

9. Physical & Chemical Properties
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Appearance	Compressed liquefied gas.
Boiling point	386.6 °F (197.2 °C) estimated
Color	Colorless.
Density	1.009 g/cm ³ estimated
Flammability (HOC)	5.7 kJ/g estimated
Flash back	No
Flash point	-156 °F (-104.4 °C) Propellant
Form	Aerosol.
Freezing point	Not available
Odor	Ammoniacal.
pH	13 - 14
Physical state	Liquid.
Pressure	85 - 105 psig @ 70F
Solubility	Completely
Specific gravity	1.0091 estimated

10. Chemical Stability & Reactivity Information
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Chemical stability	Risk of ignition.
Conditions to avoid	Heat, flames and sparks.
Hazardous decomposition products	Irritants. Toxic gas.

11. Toxicological Information

Acute effects Acute LD50: 12919 mg/kg estimated, Rat, Dermal

Component analysis - LD50**Toxicology Data - Selected LD50s and LC50s**

Diethylene Glycol Monobutyl Ether	112-34-5	Oral LD50 Rat 3384 mg/kg; Dermal LD50 Rabbit 2700 mg/kg
Monoethanolamine	141-43-5	Oral LD50 Rat 1720 mg/kg; Dermal LD50 Rabbit 1 mL/kg; Dermal LD50 Rabbit 1025 mg/kg
n-Butane	106-97-8	Inhalation LC50 Rat 658 mg/L 4 h
Propane	74-98-6	Inhalation LC50 Rat 658 mg/L 4 h
Sodium Hydroxide	1310-73-2	Dermal LD50 Rabbit 1350 mg/kg

Teratogenicity Not expected to be hazardous by OSHA criteria.

12. Ecological Information

Ecotoxicity LC50 746 mg/L, Fish, 96.00 Hours,
 EC50 3071 mg/L, Daphnia, 48.00 Hours,
 IC50 687 mg/L, Algae, 72.00 Hours,
 Components of this product are hazardous 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 to 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:

Proper shipping name	Aerosols
Hazard class	2.1
UN number	UN1950
Additional information:	
Special provisions	153, N82
Packaging exceptions	LTD QTY
Packaging non bulk	None
Packaging bulk	None



Further information

Until 12/31/2013, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/13 and may be used now in place of the "Consumer Commodity ORM-D" marking but not concurrently.

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	None
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	Forbidden



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

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)	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

Diethylene Glycol Monobutyl Ether	112-34-5	Environmental hazard
Monoethanolamine	141-43-5	Present
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
 Personal protection:

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. The information in the sheet was written based on the best knowledge and experience currently available.

MSDS sections updated

Product and Company Identification: Product Review
 Transport Information: Product Shipping Name/Packing Group
 Transport Information: Further information

Prepared by

Regulatory Compliance