



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 873-002
Product name **Germicidal Cleaner**
Effective date 06-May-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 # 09
Supersedes date 01-Jul-2010

2. Hazards Identification

Emergency overview Aerosol. Will be easily ignited by heat, spark or flames. CONTENTS UNDER PRESSURE.

Potential health effects

Eyes Moderately irritating to the eyes.

Skin Harmful if absorbed through the skin.

Inhalation Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Harmful if inhaled.

Ingestion Exposure by ingestion of an aerosol is unlikely. 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.
Kidney. Blood. Central nervous system. Liver. Respiratory system.

Chronic effects Conjunctiva. Liver injury may occur. Kidney injury may occur. 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. Prolonged skin contact may defat the skin and produce dermatitis.

Signs and symptoms Corneal damage. Narcosis. Liver enlargement. Conjunctivitis. Defatting of the skin. Irritation.

3. Composition / Information on Ingredients

Components	CAS #	Percent
2-Butoxyethanol	111-76-2	3 - 5
n-Butane	106-97-8	1 - 3
Non-hazardous and other components below reportable levels		> 90

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin contact Wash off with warm water and soap. Get medical attention if irritation develops or persists.

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

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. 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

Extinguishing media

Suitable extinguishing media

Large Fires: 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. 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.

Methods for cleaning up

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. Avoid prolonged exposure.

Storage

Level 1 Aerosol (NFPA 30B) Level 1 Aerosol.
Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Avoid exposure to long periods of sunlight. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH

Components

CAS

TWA

STEL

Ceiling

2-Butoxyethanol

111-76-2

20 ppm

Not established

Not established

n-Butane

106-97-8

1000 ppm

Not established

Not established

OSHA

Components

CAS

TWA

STEL

Ceiling

2-Butoxyethanol

111-76-2

50 ppm

Not established

Not established

Personal protective equipment

Eye / face protection

Wear chemical goggles.

Skin protection

Protective gloves.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

9. Physical & Chemical Properties

Appearance

Compressed liquefied gas.

Boiling point

212 °F (100 °C) estimated

Color

Pale yellow

Density

0.9785 g/cm³ estimated

Flammability (HOC)

3.4393 kJ/g estimated

Flash back

No

Flash point

-156 °F (-104.4 °C)

Form	Aerosol.
Freezing point	Not available
Odor	fruity
pH	11.8 - 12.8
Physical state	Liquid.
Pressure	55 - 75 psig @70F
Solubility	Partially
Specific gravity	0.9786

10. Chemical Stability & Reactivity Information

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

11. Toxicological Information

Acute effects	Acute LD50: 4536 mg/kg estimated, Rat, Dermal Acute LC50: 44 mg/l/4h estimated, Rat, Inhalation
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Component analysis - LD50

Toxicology Data - Selected LD50s and LC50s

2-Butoxyethanol	111-76-2	Inhalation LC50 Rat 2.21 mg/L 4 h; Inhalation LC50 Rat 450 ppm 4 h; Oral LD50 Rat 470 mg/kg; Dermal LD50 Rat 2270 mg/kg; Dermal LD50 Rabbit 220 mg/kg
n-Butane	106-97-8	Inhalation LC50 Rat 658 mg/L 4 h

Sensitization	Not expected to be hazardous by OSHA criteria.
Teratogenicity	Not expected to be hazardous by OSHA criteria.

12. Ecological Information

Ecotoxicity	LC50 1162 mg/L, Fish, 96.00 Hours, EC50 17668 mg/L, Daphnia, 48.00 Hours, IC50 86.04 mg/L, Algae, 72.00 Hours, Components of this product have been identified as having potential environmental concerns.
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13. Disposal Considerations

Waste codes	D001: Waste Flammable material with a flash point <140 F
Disposal instructions	Contents under pressure. 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	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
UN number 1950
Additional information:
Packaging exceptions LTD QTY
Item 5F
Labels required None
Transport Category 2

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

Proper shipping name Aerosols, flammable
Hazard class 2.1
UN number 1950
Additional information:
Packaging exceptions LTD QTY
Labels required 2.1

**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

2-Butoxyethanol	111-76-2	1.0 % de minimis concentration (applies to R-(OCH ₂ CH ₂) _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)
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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 - No
 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)	No
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**

2-Butoxyethanol	111-76-2	Present
n-Butane	106-97-8	Present

16. Other Information

Further information	HMIS Trademark Statement
HMIS® ratings	Health: 1 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.
MSDS sections updated	Product and Company Identification: Product Review Composition / Information on Ingredients: Ingredients Physical & Chemical Properties: Physical & Chemical Properties
Prepared by	Regulatory Compliance