



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number CL866DIN
Material name **DISINFECTANT BATHROOM CLEANER**
Revision date 01-20-2014
Company information CLAIRE MANUFACTURING CO
1005 S Westgate Dr
ADDISON, IL 60101 United States
Company phone
Emergency telephone US 1-866-836-8855
Emergency telephone outside US 1-952-852-4646
Version # 02
Supersedes date 01-20-2014
Expiry Date 09-Jan-2017
Product use Bathroom Cleaner

2. Hazards Identification

Emergency overview CONTENTS UNDER PRESSURE.
Aerosol. Pressurized container may explode when exposed to heat or flame. May be fatal if inhaled or swallowed.

Very toxic. Corrosive. Causes skin and eye burns.

Potential health effects
Routes of exposure Inhalation. Ingestion. Skin contact. Eye contact.
Eyes Causes chemical burns. Corrosive to the eyes and may cause severe damage including blindness. Can cause severe eye irritation.
Skin Causes chemical burns. May be harmful if absorbed through skin.
Inhalation Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Can cause severe respiratory irritation. Prolonged inhalation may be harmful.
Ingestion May be fatal if swallowed. Exposure by ingestion of an aerosol is unlikely. Components of the product may be absorbed into the body by ingestion. Ingestion causes burns of the upper digestive and respiratory tracts.

Target organs Central nervous system. Lungs. Respiratory system.

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.

Chronic effects May be harmful if absorbed through skin. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Signs and symptoms Contact with this material will cause burns to the skin, eyes and mucous membranes. Symptoms are prostration, gasping, pallor, and uncoordinated movements. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Potential environmental effects May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Ethylene Glycol Monobutyl Ether	111-76-2	3 - 7
Butane	106-97-8	1 - 5
EDTA Tetrasodium Salt	64-02-8	0.5 - 1.5
Other components below reportable levels		60 - 100

4. First Aid Measures

First aid procedures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Continue rinsing. Call a physician or poison control center immediately.
Skin contact	Remove and isolate contaminated clothing and shoes. Immediately flush skin with plenty of water. Call a physician or poison control center 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. Call a physician or poison control center immediately.
Ingestion	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth thoroughly. Never give anything by mouth to a victim who is unconscious or is having convulsions. 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. 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

Symptoms may be delayed.

General advice

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

5. Fire Fighting Measures

Flammable properties

Ruptured cylinders may rocket.

Extinguishing media

Suitable extinguishing media	Water.
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Protection of firefighters

Specific hazards arising from the chemical	Contents under pressure. Pressurized container may explode when exposed to heat or flame.
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Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus. Structural firefighters protective clothing will only provide limited protection. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
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Fire fighting equipment/instructions

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Do not direct water at source of leak or safety devices as icing may occur. Use water spray to cool unopened containers. Containers should be cooled with water to prevent vapor pressure build up. Some of these materials, if spilled, may evaporate leaving a flammable residue.

Specific methods

Cool containers exposed to flames with water until well after the fire is out.

Explosion data

Sensitivity to static discharge	Not available.
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Sensitivity to mechanical impact	Not available.
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6. Accidental Release Measures

Personal precautions

Consider initial downwind evacuation for at least 500 meters (1/3 mile). Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. For personal protection, see section 8 of the MSDS.

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. If possible, turn leaking containers so that gas escapes rather than liquid. Move the cylinder to a safe and open area if the leak is irreparable. Prevent entry into waterways, sewer, basements or confined areas.

Methods for cleaning up

Ventilate the area. Should not be released into the environment. Stop the flow of material, if this is without risk. Isolate area until gas has dispersed. Following product recovery, flush area with water. Clean up in accordance with all applicable regulations. For waste disposal, see section 13 of the MSDS.

Other information

Clean up in accordance with all applicable regulations.

7. Handling and Storage**Handling**

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not breathe mist or vapor. Do not get this material in contact with eyes. Do not get this material in contact with skin. Avoid prolonged exposure. Do not get this material on clothing. Do not use in areas without adequate ventilation. Wash thoroughly after handling.

Storage

Keep locked up. Contents under pressure. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Keep away from food, drink and animal feedingstuffs. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the MSDS). Level 1 Aerosol (NFPA 30B)

8. Exposure Controls / Personal Protection**Occupational exposure limits****ACGIH Biological Exposure Indices**

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	BEI	200 mg/g

US. ACGIH Threshold Limit Values

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	TWA	20 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Butane (CAS 106-97-8)	TWA	1000 ppm
2-Butoxyethanol (CAS 111-76-2)	TWA	97 mg/m3 20 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
Butane (CAS 106-97-8)	STEL TWA	750 ppm 600 ppm
2-Butoxyethanol (CAS 111-76-2)	TWA	20 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
Butane (CAS 106-97-8)	TWA	800 ppm
2-Butoxyethanol (CAS 111-76-2)	TWA	20 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
Butane (CAS 106-97-8)	TWA	1900 mg/m3 800 ppm
2-Butoxyethanol (CAS 111-76-2)	TWA	97 mg/m3 20 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
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2-Butoxyethanol (CAS 111-76-2)	PEL	240 mg/m3 50 ppm
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Engineering controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye / face protection Do not get in eyes. Face-shield.

Skin protection Do not get this material in contact with skin. Wear chemical protective equipment that is specifically recommended by the manufacturer.

Respiratory protection If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

9. Physical & Chemical Properties

Appearance	Liquid.
Boiling point	212 °F (100 °C) estimated
Color	Not available.
Flash point	-156.00 °F (-104.44 °C) Propellant estimated
Form	Aerosol.
Melting point/Freezing point	Not available.
Odor	Not available.
Odor threshold	Not available.
pH value	Not available.
Physical state	Gas.
Vapor pressure	55 - 75 psig @70F estimated
Solubility (water)	Not available.
Specific gravity	0.979 estimated
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Other data	
Flame extension	0 in estimated
Heat of combustion	3.44 kJ/g estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Risk of ignition.
Conditions to avoid	Aerosol containers are unstable at temperatures above 49°C. Avoid temperatures exceeding the flash point.
Hazardous decomposition products	Not available.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information**Toxicological data**

Product	Species	Test Results
19 OZ CL DISINF. BATHROOM CLNR LB 12PK (CAS Mixture)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	8244.3896 mg/kg, estimated

Product	Species	Test Results
<i>Inhalation</i>		
LC50	Cat	1308.772 mg/l, If <1L: Consumer Commodity Hours, estimated
	Mouse	32265.7188 mg/l, 2 Hours, estimated
		14432.9893 mg/l, 7 Hours, estimated
		12464.9121 mg/l, 10 Minutes, estimated
		5894.7368 mg/l, If <1L: Consumer Commodity Hours, estimated
	Rabbit	12368.4209 mg/l, If <1L: Consumer Commodity Hours, estimated
	Rat	13333.334 mg/l, 2 Hours, estimated
		8947.3682 mg/l, If <1L: Consumer Commodity Hours, estimated
		7152.7354 mg/l, 4 Hours, estimated
		1640.9779 mg/l/4h, estimated
LCL0	Cat	8596.4912 mg/l, If <1L: Consumer Commodity Hours, estimated
	Rabbit	8596.4912 mg/l, If <1L: Consumer Commodity Hours, estimated
	Rat	2456.1404 mg/l, If <1L: Consumer Commodity Hours, estimated
<i>Oral</i>		
LD50	Guinea pig	24.7372 g/kg, estimated
	Mouse	24.7071 g/kg, estimated
	Rabbit	6.5979 g/kg, estimated
	Rat	11308.042 mg/kg, estimated
<i>Other</i>		
LD50	Dog	7934.4087 g/kg, estimated
	Mouse	11620.7471 mg/kg, estimated
	Rabbit	5773.1958 mg/kg, estimated
	Rat	6805.1997 mg/kg, estimated

Components	Species	Test Results
Butane (CAS 106-97-8)		
Acute		
<i>Inhalation</i>		
LC50	Mouse	680 mg/l, 2 Hours
	Rat	658 mg/l, 4 Hours
EDTA Tetrasodium Salt (CAS 64-02-8)		
Acute		
<i>Oral</i>		
LD50	Rat	> 2000 mg/kg
<i>Other</i>		
LD50	Mouse	330 mg/kg
	Rat	4000 mg/kg
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	400 mg/kg

Components	Species	Test Results
<i>Inhalation</i>		
LC50	Mouse	700 mg/l, 7 Hours
	Rat	450 mg/l, 4 Hours
<i>Oral</i>		
LD50	Guinea pig	1.2 g/kg
	Mouse	1.2 g/kg
	Rabbit	0.32 g/kg
	Rat	560 mg/kg
<i>Other</i>		
LD50	Mouse	1130 mg/kg
	Rabbit	280 mg/kg
	Rat	340 mg/kg

* Estimates for product may be based on additional component data not shown.

Acute effects Causes burns.

Chronic effects Prolonged inhalation may be harmful. May be harmful if absorbed through skin.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

Carcinogenicity

ACGIH Carcinogens

Ethylene Glycol Monobutyl Ether (CAS 111-76-2)

A3 Confirmed animal carcinogen with unknown relevance to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Ethylene Glycol Monobutyl Ether (CAS 111-76-2)

3 Not classifiable as to carcinogenicity to humans.

12. Ecological Information

Ecotoxicological data

Product	Species	Test Results
19 OZ CL DISINF. BATHROOM CLNR LB 12PK (CAS Mixture)		
Algae	IC50	Algae 86.2182 mg/L, 72 Hours, estimated
Crustacea	EC50	Daphnia 33630.1289 mg/L, 48 Hours, estimated
Fish	LC50	Fish 1164.546 mg/L, 96 Hours, estimated

Components	Species	Test Results
EDTA Tertrasodium Salt (CAS 64-02-8)		
Algae	IC50	Algae 1.01 mg/L, 72 Hours
Aquatic		
Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>) 472 - 500 mg/l, 96 hours
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)		
Aquatic		
Fish	LC50	Inland silverside (<i>Menidia beryllina</i>) 1250 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Ecotoxicity Contains a substance which causes risk of hazardous effects to the environment.

Environmental effects An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Persistence and degradability Not available.

Partition coefficient

Butane	2.89
Ethylene Glycol Monobutyl Ether	0.83

13. Disposal Considerations

Disposal instructions	Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

TDG

UN number	UN1950
UN proper shipping name	AEROSOLS, non-flammable, containing substances in Class 8, packing group III
Hazard class	2.2
Subsidiary hazard class	8
Marine pollutant	D
Special provisions	80

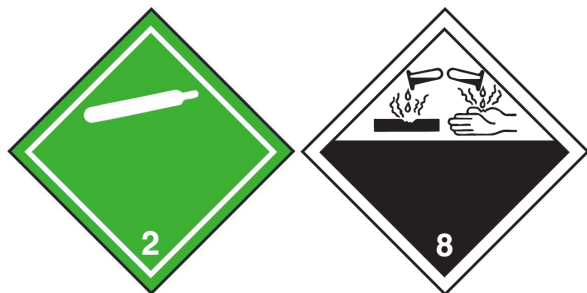
IATA

UN number	UN1950
UN proper shipping name	Aerosols, non-flammable, containing substances in Class 8, Packing Group III
Transport hazard class(es)	2.2
Subsidiary class(es)	8
ERG code	2C
Special precautions for user	Read safety instructions, MSDS and emergency procedures before handling.

IMDG

UN number	UN1950
UN proper shipping name	AEROSOLS
Transport hazard class(es)	2.2
Subsidiary class(es)	8
Labels required	None
Special precautions for user	Read safety instructions, MSDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
Packaging Exceptions	LTD QTY

IATA; IMDG; TDG



15. Regulatory Information

Canadian regulations	This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.
WHMIS status	Controlled
WHMIS classification	A - Compressed Gas D1A - Immediate/Serious-VERY TOXIC D2A - Other Toxic Effects-VERY TOXIC D2B - Other Toxic Effects-TOXIC E - Corrosive

WHMIS labeling



Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (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)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information

Disclaimer

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

This data sheet contains changes from the previous version in section(s):

Product and Company Identification: Product and Company Identification