

# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product number** CF0020  
**Product name** BAFEX DISINFECTANT/DEODORANT CLEANER  
**Effective date** 10-Aug-2007  
**Manufacturer information** BRADY INDUSTRIES, INC.  
LAS VEGAS, NV United States  
**Manufacturer phone** General Assistance 1-702-876-3990  
**Emergency telephone US** 866-836-8855  
**Emergency telephone outside US** 952-852-4646  
**Supersedes date** 10-Aug-2007

## 2. Hazards Identification

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

**OSHA regulatory status** Harmful in contact with eyes. Prolonged exposure may cause chronic effects.  
This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

**Potential health effects**

**Eyes** Contact may irritate or burn eyes. Eye contact may result in corneal injury.

**Skin** This product may be harmful if it is absorbed through the skin. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

**Inhalation** Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Prolonged inhalation may be harmful.

**Ingestion** Exposure by ingestion of an aerosol is unlikely. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause delayed lung damage.

**Target organs** Kidney.

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** Blood. Central nervous system. Liver. Respiratory system.  
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.

**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	3 - 5

## 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.

**Notes to physician**

Symptoms may be delayed.

**General advice**

Call a physician if symptoms develop or persist.

## 5. Fire Fighting Measures

**Flammable properties**

Containers may explode when heated.

**Extinguishing media****Suitable extinguishing media**

Large Fires: Water spray, fog or regular foam.

**Unsuitable extinguishing media**

Small Fires: Dry chemical, CO<sub>2</sub>, water spray or regular foam.

Do not use a solid water stream as it may scatter and spread fire.

**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

**Personal precautions**

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Keep unnecessary personnel away.

**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 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.

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. Use care in handling/storage.

## 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

**Engineering controls**

Ensure adequate ventilation, especially in confined areas.

**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.

**General hygiene considerations**

When using do not smoke. Avoid contact with eyes. Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practice.

**9. Physical & Chemical Properties**

<b>Appearance</b>	Not available
<b>Color</b>	Pale yellow
<b>Odor</b>	fruity
<b>Physical state</b>	Liquid.
<b>Form</b>	Aerosol.
<b>Flammability (HOC)</b>	2.83 kJ/g estimated
<b>Flash back</b>	No
<b>Pressure</b>	46 - 56 psig @70F
<b>Solubility</b>	Partially
<b>Flash point</b>	-156 °F (-104.4 °C) estimated
<b>Boiling point</b>	213.8 °F (101.1 °C) estimated
<b>Specific gravity</b>	0.9789 estimated
<b>pH</b>	11.76 - 12.76

**10. Chemical Stability & Reactivity Information**

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

**11. Toxicological Information**

<b>Acute effects</b>	Acute LD50: 8605 mg/kg estimated, Rat, Oral Acute LD50: 4536 mg/kg estimated, Rat, Dermal Acute LC50: 40 mg/l/4h estimated, Rat, Inhalation
<b>Sensitization</b>	Not expected to be hazardous by OSHA criteria.
<b>Local effects</b>	Contact may irritate or burn eyes. Liver toxicity. Blood disorder may occur after ingestion. Components of the product may be absorbed into the body through the skin.
<b>Chronic effects</b>	Hazardous by OSHA criteria. This product may be harmful if it is absorbed through the skin. 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.  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.
<b>Subchronic effects</b>	Kidney injury may occur. Blood disorder may occur after prolonged inhalation. Blood disorder may occur after prolonged skin contact.
<b>Neurological effects</b>	Hazardous by OSHA criteria.
<b>Mutagenicity</b>	Not expected to be hazardous by OSHA criteria.
<b>Reproductive effects</b>	Not expected to be hazardous by OSHA criteria.
<b>Teratogenicity</b>	Not expected to be hazardous by OSHA criteria.
<b>Epidemiology</b>	Hazardous by OSHA criteria.

## 12. Ecological Information

**Ecotoxicity** LC50 1098 mg/L estimated, Fish, 96.00 Hours,  
EC50 42929 mg/L estimated, Daphnia, 48.00 Hours,  
IC50 86.05 mg/L estimated, Algae, 72.00 Hours,  
Components of this product have been identified as having potential environmental concerns.

## 13. Disposal Considerations

**Waste codes** D001: Waste Flammable material with a flash point <140 F  
**Disposal instructions** Contents under pressure. Incinerate the material under controlled conditions in an approved incinerator. 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, flammable  
**Hazard class** 2.1  
**UN number** 1950  
**Additional information:**  
**Packaging exceptions** LTD QTY  
**Item** 5F  
**Labels required** 2.1  
**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



## 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.

### 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)**

**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**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
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****HMIS® ratings**

Health: 1\*  
Flammability: 2  
Physical hazard: 0  
Personal protection: X

**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.

**Issue date**

10-Aug-2007