



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product number** 046-003  
**Product name** Video Display Terminal Cleaner  
**Effective date** 20-Feb-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** 14-Oct-2009

## 2. Hazards Identification

**Emergency overview** CONTENTS UNDER PRESSURE. Aerosol. Will be easily ignited by heat, spark or flames.  
Harmful in contact with eyes. Prolonged exposure may cause chronic effects.

**Potential health effects**

**Routes of exposure** Ingestion. Skin contact. Eye contact.

**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. May cause delayed lung damage. Components of the product may be absorbed into the body by ingestion.

**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.  
Central nervous system. Lungs.

**Chronic effects** Unconsciousness. Conjunctiva. 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** Discomfort in the chest. Corneal damage. Narcosis. Cyanosis. Conjunctivitis. Defatting of the skin. Irritation.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent
2-Butoxyethanol	111-76-2	3 - 5
Ethyl Alcohol	64-17-5	3 - 5
Propane	74-98-6	1 - 3
n-Butane	106-97-8	1 - 3
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 take off all contaminated clothing. Wash off with warm water and soap. Get medical attention if irritation develops or persists.

**Inhalation**  
**Ingestion**

Move to fresh air. Call a physician if symptoms develop or persist.  
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** Symptoms may be delayed.

## 5. Fire Fighting Measures

**Flammable properties** Vapor or gas may spread to distant ignition sources and flash back. Runoff to sewer may cause fire or explosion hazard.

### Extinguishing media

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

### 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. 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 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 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. Keep away from heat and sources of ignition. Avoid exposure to long periods of sunlight. Store in cool place. Keep the container dry. Keep in an area equipped with sprinklers. Keep out of the reach of children. Level 1 Aerosol (NFPA 30B) 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
2-Butoxyethanol	111-76-2	20 ppm	Not established	Not established
Ethyl Alcohol	64-17-5	1000 ppm	1000 ppm	Not established
Propane	74-98-6	1000 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
Ethyl Alcohol	64-17-5	1000 ppm	Not established	Not established
Propane	74-98-6	1000 ppm	Not established	Not established

**Personal protective equipment**

<b>Eye / face protection</b>	Wear chemical goggles.
<b>Skin protection</b>	Wear appropriate chemical resistant gloves. Wear appropriate chemical resistant clothing.
<b>Respiratory protection</b>	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.

<b>9. Physical &amp; Chemical Properties</b>
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<b>Appearance</b>	Compressed liquefied gas.
<b>Boiling point</b>	204.8 °F (96.1 °C) estimated
<b>Color</b>	Pale yellow
<b>Density</b>	0.9583 g/cm <sup>3</sup> estimated
<b>Flammability (HOC)</b>	4.0975 kJ/g estimated
<b>Flash back</b>	No
<b>Flash point</b>	-156 °F (-104.4 °C) Propellant
<b>Form</b>	Liquid. Aerosol.
<b>Freezing point</b>	Not available
<b>Odor</b>	Butyl
<b>pH</b>	9.5 - 10.5
<b>Physical state</b>	Liquid.
<b>Pressure</b>	90 - 110 psig @ 70F
<b>Solubility</b>	Partially
<b>Specific gravity</b>	0.9584 estimated

<b>10. Chemical Stability &amp; Reactivity Information</b>
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<b>Chemical stability</b>	Risk of ignition.
<b>Conditions to avoid</b>	Heat, flames and sparks.
<b>Incompatible materials</b>	None known.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

<b>11. Toxicological Information</b>
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<b>Acute effects</b>	Acute LD50: 5684 mg/kg estimated, Rat, Dermal	
<b>Component analysis - LD50</b>		
<b>Toxicology Data - Selected LD50s and LC50s</b>		
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
Ethyl Alcohol	64-17-5	Oral LD50 Rat 7060 mg/kg; Inhalation LC50 Rat 124.7 mg/L 4 h
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
<b>Sensitization</b>	Not expected to be hazardous by OSHA criteria.	
<b>Carcinogenicity</b>		
<b>IARC - Group 1 (Carcinogenic to Humans)</b>		
Ethyl Alcohol	64-17-5	Monograph 100E [in preparation] (in alcoholic beverages); Monograph 96 [in preparation] (in alcoholic beverages)
<b>Teratogenicity</b>	Not expected to be hazardous by OSHA criteria.	

## 12. Ecological Information

<b>Ecotoxicity</b>	Components of this product have been identified as having potential environmental concerns.  LC50 28864 mg/L, Fish, 96.00 Hours, EC50 22852 mg/L, Daphnia, 48.00 Hours, IC50 11968 mg/L, Algae, 72.00 Hours,
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## 13. Disposal Considerations

<b>Waste codes</b>	D001: Waste Flammable material with a flash point <140 F
<b>Disposal instructions</b>	Contents under pressure. Do not puncture, incinerate or crush. Dispose of this material and its container at hazardous or special waste collection point. 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:

<b>Proper shipping name</b>	Consumer commodity
<b>Hazard class</b>	ORM-D
<b>Subsidiary hazard class</b>	None
<b>Additional information:</b>	
<b>Packaging exceptions</b>	156, 306
<b>Packaging non bulk</b>	156, 306
<b>Packaging bulk</b>	None

### IMDG

#### Basic shipping requirements:

<b>Proper shipping name</b>	AEROSOLS
<b>Hazard class</b>	2.1
<b>UN number</b>	1950
<b>Additional information:</b>	
<b>Packaging exceptions</b>	LTD QTY
<b>Item</b>	5F
<b>Labels required</b>	None
<b>Transport Category</b>	2



### IATA

#### Basic shipping requirements:

<b>Proper shipping name</b>	Aerosols, flammable
<b>Hazard class</b>	2.1
<b>UN number</b>	1950
<b>Additional information:</b>	
<b>Packaging exceptions</b>	LTD QTY
<b>Labels required</b>	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 <sub>2</sub> CH <sub>2</sub> ) <sub>n</sub> -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 - 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)	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
Ethyl Alcohol	64-17-5	Present
n-Butane	106-97-8	Present
Propane	74-98-6	Present

**16. Other Information****Further information**

HMIS® is a registered trade and service mark of the NPCA.

**HMIS® ratings**

Health: 1\*  
 Flammability: 2  
 Physical hazard: 0

**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  
 Hazards Identification: Target organs  
 Hazards Identification: Chronic effects  
 Hazards Identification: Main symptoms  
 Physical & Chemical Properties: Physical & Chemical Properties  
 Toxicological Information: Reproductivity

**Prepared by**

Regulatory Compliance