



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 046
Product name Video Display Terminal Cleaner
Effective date 05-Aug-2008
Company information Claire Manufacturing
500 Vista Ave.
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 # 05
Supersedes date 28-Feb-2008

2. Hazards Identification

Emergency overview CONTENTS UNDER PRESSURE. Aerosol. Pressurized container may explode when exposed to heat or flame.
Irritating to eyes. Prolonged exposure may cause chronic effects.

Potential health effects

Eyes Causes eye irritation.

Skin This product may be harmful if it is absorbed through the skin.

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

Ingestion Exposure by ingestion of an aerosol is unlikely. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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

Chronic effects Unconsciousness. Liver injury may occur. Kidney injury may occur.

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	3 - 5
n-Butane	106-97-8	3 - 5
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. Get medical attention if irritation develops or persists.

Skin contact Immediately take off all contaminated clothing. Wash off with soap and water. Get medical attention if irritation develops or persists.

Inhalation Call a physician if symptoms develop or persist.

Ingestion Rinse mouth. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration.

5. Fire Fighting Measures

Flammable properties Containers may explode when heated. Vapor or gas may spread to distant ignition sources and flash back.

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

Specific hazards arising from the chemical

Fire may produce irritating, corrosive and/or toxic gases.

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. Use only in area provided with appropriate exhaust ventilation. Do not use if spray button is missing or defective. Avoid contact with eyes. Wear personal protective equipment. 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 the container dry. Keep in an area equipped with sprinklers. 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
Ethyl Alcohol	64-17-5	1000 ppm	Not established	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

Eye / face protection

Wear chemical goggles.

Skin protection

Not normally needed.

Respiratory protection

No personal respiratory protective equipment normally required.

9. Physical & Chemical Properties

Appearance

Compressed liquefied gas.

Boiling point

203 °F (95 °C) estimated

Color

Pale yellow

Flammability (HOC)

4.0856 kJ/g estimated

Flash back

No

Flash point

-156 °F (-104.4 °C) estimated

Form	Aerosol.
Odor	Butyl
pH	9.5 - 10.5
Physical state	Liquid.
Pressure	75 - 85 psig @ 70F
Solubility	Partially
Specific gravity	0.9578 estimated

10. Chemical Stability & Reactivity Information

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

11. Toxicological Information

Acute effects	Acute LD50: 5699 mg/kg estimated, Rat, Dermal Acute LC50: 56 mg/l/4h estimated, Rat, Inhalation
Sensitization	Not expected to be hazardous by OSHA criteria.
Reproductive effects	Not expected to be hazardous by OSHA criteria. Possible reproductive hazard.
Teratogenicity	Not expected to be hazardous by OSHA criteria.

12. Ecological Information

Ecotoxicity	LC50 28839 mg/L estimated, Fish, 96.00 Hours, EC50 42541 mg/L estimated, Daphnia, 48.00 Hours, IC50 11909 mg/L estimated, 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)

Hazard categories
 Immediate Hazard - Yes
 Delayed Hazard - No
 Fire Hazard - Yes
 Pressure Hazard - Yes
 Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

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
Ethyl Alcohol	64-17-5	Present
n-Butane	106-97-8	Present
Propane	74-98-6	Present

16. Other Information

HMIS® ratings

Health: 1
 Flammability: 1
 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

Hazards Identification: Emergency overview

Hazards Identification: Target organs

Handling and Storage: Storage

Physical & Chemical Properties: Physical & Chemical Properties

Transport Information: Agency Name and Packaging Type/Transport Mode Selection

Regulatory Information: United States