

6016

MATERIAL SAFETY DATA SHEET

CL-CS230

1. Product and Company Identification

Product number 230-001
Product name **Glass Cleaner**
Effective date 15-Jun-2011
Company information CSI
1005 Westgate Avenue
Addison, IL 60101 United States
Company phone General Assistance 1-630-543-7600
Emergency telephone US 1-866-836-8855
Emergency telephone outside US 1-952-852-4646
Version # 03
Supersedes date 13-Nov-2007

2. Hazards Identification

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

Potential health effects

Eyes Health injuries are not known or expected under normal use.

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.

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.

Chronic effects Unconsciousness.

Signs and symptoms Cyanosis.

3. Composition / Information on Ingredients

Components	CAS #	Percent
n-Butane	106-97-8	3 - 5
2-Butoxyethanol	111-76-2	1 - 3
Isopropyl Alcohol	67-63-0	1 - 3
Propane	74-98-6	1 - 3
Non-hazardous and other components below reportable levels		> 90

4. First Aid Measures

First aid procedures

Eye contact Flush eyes with water as a precaution. 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 If symptoms develop move victim to fresh air. If symptoms persist, get medical attention.

Ingestion In the unlikely event of swallowing contact a physician or poison control center.

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 (CO₂).

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. Do not use if spray button is missing or defective. 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, sparks, and flame. 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
n-Butane	106-97-8	1000 ppm	Not established	Not established
2-Butoxyethanol	111-76-2	20 ppm	Not established	Not established
Isopropyl Alcohol	67-63-0	200 ppm	400 ppm	Not established
Propane	74-98-6	1000 ppm	Not established	Not established

OSHA

Components	CAS #	TWA	STEL	Ceiling
2-Butoxyethanol	111-76-2	50 ppm	Not established	Not established
Isopropyl Alcohol	67-63-0	400 ppm	Not established	Not established
Propane	74-98-6	1000 ppm	Not established	Not established

Personal protective equipment**Eye / face protection**

Not normally needed.

Skin protection

Not normally needed.

Respiratory protection

No personal respiratory protective equipment normally required. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

9. Physical & Chemical Properties

Appearance

Compressed liquefied gas.

Boiling point

203 °F (95 °C) estimated

Product name: Glass Cleaner

Product #: 230-001 Revision date: 15-JUN-2011 Print date: 15-JUN-2011

MSDS US

2 / 5

Color	Clear. Colorless.
Density	0.9724 g/cm3 estimated
Flammability (HOC)	3.2733 kJ/g estimated
Flash back	No
Flash point	-156 °F (-104.4 °C) Propellant
Form	Liquid. Aerosol.
Freezing point	Not available
Odor	Solvent.
pH	10.43 - 11.43
Physical state	Liquid.
Pressure	65 - 75 psig @ 70F
Solubility	Partially
Specific gravity	0.9725 estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Risk of ignition.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	None known.

11. Toxicological Information

Acute effects Acute LD50: 11375 mg/kg estimated, Rat, Dermal

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
Isopropyl Alcohol	67-63-0	Inhalation LC50 Rat 72.6 mg/L 4 h; Oral LD50 Rat 4396 mg/kg; Dermal LD50 Rat 12800 mg/kg; Dermal LD50 Rabbit 12870 mg/kg
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

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

12. Ecological Information

Ecotoxicity	LC50 1474 mg/L estimated, Fish, 96.00 Hours, EC50 29427 mg/L estimated, Daphnia, 48.00 Hours, IC50 52587 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. Dispose of this material and its container at hazardous or special waste collection point. Do not incinerate sealed containers. 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
Labels required None

**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)
Isopropyl Alcohol	67-63-0	1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)

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 - No
 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)	Yes
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)	Yes
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
Isopropyl Alcohol	67-63-0	Environmental hazard
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

This document has undergone significant changes and should be reviewed in its entirety.

Prepared by

Regulatory Compliance