

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 230
Product name CLEAR SHINE GLASS CLEANER
Effective date 08-Jun-2007
Manufacturer information CSI PRODUCTS, INC.
ADDISON, IL 60101 United States
Manufacturer phone General Assistance 1-630-543-7600
Emergency telephone US 1-866-836-8855
Emergency telephone outside US 1-952-852-4646

2. Hazards Identification

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

OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects

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.

Signs and symptoms Cyanosis. Liver enlargement. Jaundice.

3. Composition / Information on Ingredients

Components	CAS #	Percent
n-Butane	106-97-8	3 - 5
2-Butoxyethanol	111-76-2	3 - 5
Isopropyl Alcohol	67-63-0	3 - 5
Propane	74-98-6	3 - 5
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 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. If ingestion of a large amount does occur, seek medical attention.

Notes to physician

Symptoms may be delayed.

General advice

If you feel unwell, seek medical advice (show the label where possible).

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.**Unsuitable extinguishing media**

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. Use only in area provided with appropriate exhaust ventilation. 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.

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

Engineering controls	Ensure adequate ventilation, especially in confined areas.
Personal protective equipment	
Eye / face protection	Not normally needed.
Skin protection	Not normally needed.
Respiratory protection	No personal respiratory protective equipment normally required.
General hygiene considerations	When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	Compressed liquefied gas.
Color	Clear. Colorless.
Odor	Solvent.
Physical state	Liquid.
Form	Aerosol.
Flammability (HOC)	3.2683 kJ/g estimated
Flash back	No
Pressure	48 - 58 psig @ 70F
Solubility	Partially
Flash point	-156 °F (-104.4 °C)
Boiling point	203 °F (95 °C) estimated
Specific gravity	0.943 estimated
pH	10.5 - 11.5

10. Chemical Stability & Reactivity Information

Chemical stability	Risk of ignition. Stable at normal conditions.
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: 14719 mg/kg estimated, Rat, Oral Acute LD50: 11383 mg/kg estimated, Rat, Dermal Acute LC50: 96 mg/l/4h estimated, Rat, Inhalation
Sensitization	Not expected to be hazardous by OSHA criteria.
Local effects	Liver toxicity. Blood disorder may occur after ingestion.
Chronic effects	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 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.
Subchronic effects	Kidney injury may occur. Blood disorder may occur after prolonged inhalation. Blood disorder may occur after prolonged skin contact.
Neurological effects	Not expected to be hazardous by OSHA criteria.
Mutagenicity	Not expected to be hazardous by OSHA criteria.
Reproductive effects	Not expected to be hazardous by OSHA criteria.
Teratogenicity	Not expected to be hazardous by OSHA criteria.
Epidemiology	Not expected to be hazardous by OSHA criteria.
Further information	Symptoms may be delayed.

12. Ecological Information

Ecotoxicity LC50 1357 mg/L, Fish, 96.00 Hours,
EC50 41919 mg/L, Daphnia, 48.00 Hours,
IC50 52684 mg/L, 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 Consult authorities before disposal. Contents under pressure. Do not puncture, incinerate or crush. Incinerate the material under controlled conditions in an approved incinerator. 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



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 - 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)	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

HMIS® ratings
Health: 1
Flammability: 1
Physical hazard: 0

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 08-Jun-2007