

# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product number** 230  
**Product name** CLEAR SHINE GLASS CLEANER  
**Effective date** 13-Nov-2007  
**Company information** CSI PRODUCTS, INC.  
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  
**Supersedes date** 08-Jun-2007

## 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.

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

**Signs and symptoms** Unconsciousness. Liver injury may occur. Kidney injury may occur.  
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, CO<sub>2</sub>, 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

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

## 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 nitrogen.

## 11. Toxicological Information

<b>Acute effects</b>	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
<b>Sensitization</b>	Not expected to be hazardous by OSHA criteria.
<b>Local effects</b>	Liver toxicity. Blood disorder may occur after ingestion.
<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 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>	Not expected to be 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>	Not expected to be hazardous by OSHA criteria.
<b>Further information</b>	Symptoms may be delayed.

## 12. Ecological Information

<b>Ecotoxicity</b>	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.
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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>	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**

13-Nov-2007