



# Safety Data Sheet

## Section 1. Chemical Product and Company Identification

**Product name**            **Streak-Free Glass Cleaner**  
**Product code**            **ZU1120**  
**Date of issue**            **10/24/12**            **Supersedes 09/10/10**  
 Not available.

### Emergency Telephone Numbers

**For MSDS Information:**  
 Compliance Services 404-352-1680

**For Medical Emergency**  
 (877) 541-2016 Toll Free - All Calls Recorded

**For Transportation Emergency**  
 CHEMTREC: (800) 424-9300 - All Calls Recorded  
 In the District of Columbia (202) 483-7616

**Prepared By**  
 Compliance Services  
 1420 Seaboard Industrial Blvd.  
 Atlanta, GA 30318

## Section 2. Hazards Identification

### Emergency overview

\*Hazard Determination System (HDS): Health, Flammability, Reactivity

**WARNING!**

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FLAMMABLE LIQUID AND VAPOR. COMBUSTIBLE. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. CAUSES EYE IRRITATION. MAY BE HARMFUL IF SWALLOWED. MAY CAUSE SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. CANCER HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE CANCER.

Flammable liquid. Harmful by inhalation and in contact with skin. May be harmful if swallowed. Severely irritating to eyes. Slightly irritating to the skin. Keep away from heat, sparks and flame. Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Contains material that may cause target organ damage, based on animal data. Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

**NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.**

**Acute Effects**            **Routes of Entry**            Absorbed through skin. Eye contact. Inhalation.

**Eyes**            Causes eye irritation. Inflammation of the eye is characterized by redness, watering and itching.

**Skin**            May cause skin irritation. May be harmful if absorbed through the skin. Skin inflammation is characterized by itching, scaling, or reddening.

**Inhalation**    Avoid breathing vapors, spray or mists. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression.

**Ingestion**    May be harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.

**Chronic effects**    Prolonged or repeated contact may dry skin and cause irritation. Overexposure of this product by inhalation or absorption can produce central nervous system depression resulting in headache, nausea and/or dizziness. Contains material which may cause damage to the following organs: blood, kidneys, liver, upper respiratory tract, skin, eyes, central nervous system (CNS).

**Carcinogenicity**    Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure.

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
2-butoxyethanol	A3	3	-	-	-	-
ethanol	A3	1	-	-	-	-

**Additional Information: See Toxicological Information (Section 11)**

**Section 3. Composition/Information on Ingredients****Name of Hazardous Ingredients**

<b>Name of Hazardous Ingredients</b>	<b>CAS number</b>	<b>% by Weight</b>
Butyl Cellosolve; Ethylene Glycol Monobutyl Ether; 2-Butoxyethanol	111-76-2	1.8 - 2.2
Ethanol; Ethyl Alcohol	64-17-5	0.76925 - 0.95025

**Section 4. First Aid Measures**

<b>Eye Contact</b>	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention immediately.
<b>Skin Contact</b>	Rinse with plenty of running water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Wash clothing before reuse. Get medical attention if irritation develops.
<b>Inhalation</b>	Move exposed person to fresh air. If irritation persists, get medical attention.
<b>Ingestion</b>	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If affected person is conscious, give plenty of water to drink. Get medical attention immediately.

**Section 5. Fire Fighting Measures**

National Fire Protection Association (U.S.A.)



<b>Flash Point</b>	Closed cup: 43°C (109.4°F) [Tagliabue.]
<b>Flammable Limits</b>	FLAMMABLE
<b>Flammability</b>	COMBUSTIBLE LIQUID AND VAPOR.
<b>Fire hazard</b>	Avoid all possible sources of ignition (spark or flame). In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
<b>Fire-Fighting Procedures</b>	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam. Fire-fighters should wear appropriate protective equipment.

**Section 6. Accidental Release Measures**

<b>Spill Clean up</b>	Eliminate all ignition sources. Put on appropriate personal protective equipment (see section 8). Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container.
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**Section 7. Handling and Storage**

<b>Handling</b>	Put on appropriate personal protective equipment (see section 8). Store and use away from heat, sparks, open flame or any other ignition source. Avoid contact with eyes, skin and clothing. Avoid breathing vapors, spray or mists. Use only with adequate ventilation. Do not ingest. Observe label precautions. Wash thoroughly after handling. Empty containers retain product residue and can be hazardous. Do not reuse container.
<b>Storage</b>	Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Keep out of the reach of children.

**Section 8. Exposure Controls/Personal Protection****Product name**

Butyl Cellosolve; Ethylene Glycol Monobutyl Ether; 2-Butoxyethanol

Ethanol; Ethyl Alcohol

**Exposure limits**

**OSHA PEL 1989 (United States, 3/1989). Absorbed through skin.**  
TWA: 25 ppm 8 hour(s).  
TWA: 120 mg/m<sup>3</sup> 8 hour(s).

**NIOSH REL (United States, 6/2009). Absorbed through skin.**  
TWA: 5 ppm 10 hour(s).  
TWA: 24 mg/m<sup>3</sup> 10 hour(s).

**ACGIH TLV (United States, 2/2010).**  
TWA: 20 ppm 8 hour(s).

**OSHA PEL (United States, 6/2010). Absorbed through skin.**  
TWA: 50 ppm 8 hour(s).  
TWA: 240 mg/m<sup>3</sup> 8 hour(s).

**ACGIH TLV (United States, 2/2010).**  
STEL: 1000 ppm 15 minute(s).

**OSHA PEL 1989 (United States, 3/1989).**  
TWA: 1000 ppm 8 hour(s).  
TWA: 1900 mg/m<sup>3</sup> 8 hour(s).

**NIOSH REL (United States, 6/2009).**  
TWA: 1000 ppm 10 hour(s).  
TWA: 1900 mg/m<sup>3</sup> 10 hour(s).

**OSHA PEL (United States, 6/2010).**  
TWA: 1000 ppm 8 hour(s).  
TWA: 1900 mg/m<sup>3</sup> 8 hour(s).

**Personal Protective Equipment (PPE)**

**Eyes** Safety glasses.

**Body** For prolonged or repeated handling, use gloves. Recommended: Neoprene gloves. Nitrile gloves. Rubber gloves.

**Respiratory** Use with adequate ventilation. A respirator is not needed under normal and intended conditions of product use.



### Section 9. Physical and Chemical Properties

<b>Physical State</b>	Liquid.	<b>Color</b>	Clear. Blue. [Dark]
<b>pH</b>	10.5 - 11.5	<b>Odor</b>	Pleasant.
<b>Boiling Point</b>	96.1°C (205°F)	<b>Vapor Pressure</b>	Not determined.
<b>Specific Gravity</b>	0.99	<b>Vapor Density</b>	Not determined.
<b>Solubility</b>	Easily soluble in the following materials: cold water and hot water.	<b>Evaporation Rate</b>	1 (Water = 1)
		<b>VOC (Consumer)</b>	3 % (w/w) 0.246 lbs/gal (29.4 g/l) [ISO 11890-1]

### Section 10. Stability and Reactivity

**Stability and Reactivity** The product is stable.

**Incompatibility** Keep away from heat, sparks and flame. Slightly reactive or incompatible with the following materials: oxidizing materials.

**Hazardous Polymerization** Will not occur.

**Hazardous Decomposition Products** carbon oxides (CO, CO<sub>2</sub>)

### Section 11. Toxicological Information

#### Acute Toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-butoxyethanol	LC50 Inhalation Gas.	Rat	450 ppm	4 hours
	LD50 Dermal	Rabbit	220 mg/kg	-
	LD50 Oral	Rat	250 mg/kg	-
ethanol	LC50 Inhalation Vapor	Rat	124700 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	7 g/kg	-

### Section 12. Ecological Information

**Environmental Effects** Not available.

#### Aquatic Ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
2-butoxyethanol	-	Acute EC50 >1000 mg/L Fresh water	Daphnia - Water flea - Daphnia magna - <24 hours	48 hours
	-	Acute LC50 800000 ug/L Marine water	Crustaceans - Common shrimp, sand shrimp - Crangon crangon	48 hours
	-	Acute LC50 1250000 ug/L Marine water	Fish - Inland silverside - Menidia beryllina - 40 to 100 mm	96 hours
ethanol	-	Acute LC50 25500 ug/L Marine water	Crustaceans - Brine shrimp - Artemia franchiscana - Larvae	48 hours

### Section 13. Disposal Considerations

#### Waste Information

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities for additional information.

**Waste Stream** Code: -  
Classification: - [Non-hazardous waste]  
Origin: -

**Section 14. Transport Information**

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
<b>DOT Classification</b>	Not regulated.	-	-	-	
<b>TDG Classification</b>	UN1993	Flammable liquid, n.o.s. (2-butoxyethanol)	3	III	
<b>IMDG Class</b>	UN1993	Flammable liquid, n.o.s. (2-butoxyethanol)	3	III	

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.

PG\* : Packing group

**Section 15. Regulatory Information****U.S. Federal Regulations**

SARA 313 toxic chemical notification and release reporting:

**Product name**

2-butoxyethanol

**Clean Water Act (CWA) 311:** ammonia, anhydrous

**Clean Air Act (CAA) 112 regulated toxic substances:** No products were found.

All Components of this product are listed or exempt from listing on TSCA Inventory.

TSCA 5(a)2 final significant new use rules TSCA 5(e) substance consent order TSCA 8(a) IUR:

Not determined United States inventory (TSCA 8b) Not determined.

**State Regulations****California Prop 65**

No products were found.

**Canada****WHMIS (Canada)**

Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).

Class D-2B: Material causing other toxic effects (Toxic).

**Section 16. Other Information**

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

\*NOTE: Hazard Determination System (HDS) ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although these ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HDS ratings are to be used with a fully implemented program to relay the meanings of this scale.