

# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product number** 050  
**Product name** **Glass Cleaner**  
**Effective date** 10-Mar-2009  
**Company information** Photo Brasive Systems  
4832 Grand Ave.  
Duluth, MN 55807 United States  
**Company phone** General Assistance 800-643-1037  
**Emergency telephone US** 800-424-9300  
**Emergency telephone outside US** 703-527-3887  
**Version #** 14  
**Supersedes date** 04-Mar-2009

## 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. May be ignited by heat, sparks or flames.

**Potential health effects**

**Routes of exposure** Ingestion. Skin contact.

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

**Skin** This product may be harmful if it is absorbed through the skin. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

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

**Ingestion** Exposure by ingestion of an aerosol is unlikely. Components of the product may be absorbed into the body by ingestion.

**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.  
Blood. Liver.

**Chronic effects** Unconsciousness. Liver 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	1 - 3
n-Butane	106-97-8	1 - 3
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. Continue rinsing. Get medical attention if irritation develops or persists.

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

**Inhalation** If symptoms develop move victim to fresh air. If symptoms persist, get medical attention.

**Ingestion** Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.

## 5. Fire Fighting Measures

<b>Flammable properties</b>	Vapor or gas may spread to distant ignition sources and flash back.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
<b>Protection of firefighters</b>	
<b>Protective equipment and precautions for firefighters</b>	Containers should be cooled with water to prevent vapor pressure build up.

## 6. Accidental Release Measures

<b>Methods for containment</b>	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.
<b>Methods for cleaning up</b>	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

<b>Handling</b>	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. Do not get this material in contact with eyes. Do not get this material in contact with skin. Avoid prolonged exposure.
<b>Storage</b>	Level 1 Aerosol. Contents under pressure. Do not puncture, incinerate or crush. Keep away from heat, sparks, and flame. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Avoid exposure to long periods of sunlight. Keep out of the reach of children. 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
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

<b>Eye / face protection</b>	Wear chemical goggles.
<b>Skin protection</b>	Wear appropriate chemical resistant gloves. Wear appropriate chemical resistant clothing.
<b>Respiratory protection</b>	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

## 9. Physical & Chemical Properties

<b>Appearance</b>	Compressed liquefied gas.
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<b>Boiling point</b>	206.6 °F (97.2 °C) estimated
<b>Color</b>	Colorless.
<b>Flammability (HOC)</b>	3.7946 kJ/g estimated
<b>Flash back</b>	No
<b>Flash point</b>	-156 °F (-104.4 °C)
<b>Form</b>	Aerosol.
<b>Odor</b>	Butyl
<b>pH</b>	9.5 - 10.5
<b>Physical state</b>	Liquid.
<b>Pressure</b>	66 - 76 psig @ 70F
<b>Solubility</b>	Completely
<b>Specific gravity</b>	0.9572 estimated

## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Stable at normal conditions.
<b>Conditions to avoid</b>	Heat, flames and sparks.
<b>Incompatible materials</b>	None known.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological Information

<b>Acute effects</b>	Acute LD50: 5684 mg/kg estimated, Rat, Dermal
<b>Sensitization</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.

## 12. Ecological Information

<b>Ecotoxicity</b>	Components of this product have been identified as having potential environmental concerns.  LC50 28957 mg/L estimated, Fish, 96.00 Hours, EC50 43419 mg/L estimated, Daphnia, 48.00 Hours, IC50 12207 mg/L estimated, Algae, 72.00 Hours,
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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>	Contents under pressure. Do not puncture, incinerate or crush. Dispose of this material and its container at hazardous or special waste collection point. 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:

<b>Proper shipping name</b>	Consumer commodity
<b>Hazard class</b>	ORM-D
<b>Subsidiary hazard class</b>	None
<b>Additional information:</b>	
<b>Packaging exceptions</b>	156, 306
<b>Packaging non bulk</b>	156, 306
<b>Packaging bulk</b>	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



<b>15. Regulatory Information</b>
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**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 <sub>2</sub> CH <sub>2</sub> ) <sub>n</sub> -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 - Yes  
 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)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	Yes
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

<b>Further information</b>	HMIS® is a registered trade and service mark of the NPCA.
<b>HMIS® ratings</b>	Health: 1 Flammability: 1 Physical hazard: 0
<b>Disclaimer</b>	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.
<b>MSDS sections updated</b>	This document has undergone significant changes and should be reviewed in its entirety.