

# SAFETY DATA SHEET.

Issuing date 28-Sep-2017

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Version 3

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

**Product name** FOAMING GLASS CLEANER

**Recommended use of the chemical and restrictions on use**

**Product code** A-0001

**Product Type** Combustible liquid  
**Synonyms** None

**Supplier's details**

**Recommended Use** Glass Cleaner.  
**Uses advised against** No information available

**Manufactured For:**  
Imperial Supplies LLC  
789 Armed Forces Drive  
P.O. Box 11008  
Green Bay, WI 53407-1008  
1-800-558-2808

**Manufacturer**  
American Jetway Corporation  
34136 Myrtle Street  
Wayne, MI 48184-0126  
Phone:(734) 721-5930

**Emergency telephone number**  
**Chemical Emergency Phone Number** CHEMTREC: 1-800-262-8200 ID 1195 (UNITED STATES)

## 2. HAZARDS IDENTIFICATION

### Classification

Flammable Liquids	Category 4
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### GHS Label elements, including precautionary statements

#### Emergency Overview

<b>WARNING</b>		
<b>Hazard Statements</b>		
Combustible liquid		
<b>Appearance</b> Clear	<b>Physical state</b> Liquid	<b>Odor</b> Ammonia

#### Precautionary Statements - Prevention

Keep away from heat/sparks/open flames/hot surfaces.-No smoking.  
Wear eye protection / face protection / protective gloves

#### Precautionary Statements - Response

In case of fire: Use CO2, dry chemical, or foam to extinguish.

#### Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed.  
Keep cool.

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

None

#### Other information

0% of the mixture consists of ingredient(s) of unknown toxicity.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %*
2-BUTOXYETHANOL	111-76-2	1-10
ETHYLENE GLYCOL	107-21-1	<0.1
ETHYLENE OXIDE	75-21-8	<0.00001
1,4-DIOXANE	123-91-1	<0.00001

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. FIRST AID MEASURES

### First aid measures for different exposure routes

<b>General advice</b>	Avoid contact with eyes, skin, and clothing. Avoid breathing vapors, mist, or gas.
<b>Eye contact</b>	Immediately flush with plenty of water for at least 15 minutes. After initial flushing, remove any contact lenses and continue flushing. If eye irritation persists, consult a doctor.
<b>Skin contact</b>	Wash off with soap and plenty of water. Remove and wash contaminated clothing before re-use. If skin irritation persists, call a physician.
<b>Inhalation</b>	Move to fresh air. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately.
<b>Ingestion</b>	Call a physician or Poison Control Center immediately. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.

**Most important symptoms/effects, acute and delayed**

**Main Symptoms** Excessive exposure to the product may result in eye, skin, or respiratory irritation. Under normal conditions of intended use, this product does not pose a risk to health.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to physician** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Water fog. Dry chemical. Carbon dioxide (CO<sub>2</sub>). Cool containers / tanks with water spray. Use: Carbon dioxide (CO<sub>2</sub>). Water spray. Alcohol-resistant foam. Water Spray, Alcohol-resistant foam, Carbon Dioxide, and Dry Chemical.

**Unsuitable Extinguishing Media** Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**

Keep product and empty container away from heat and sources of ignition. Extremely Flammable / Flammable. Risk of ignition. Combustible material.

**Explosion Data**

**Sensitivity to Mechanical Impact** none.

**Sensitivity to Static Discharge** Yes.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use shielding to protect fire-fighters from bursting containers.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Use with adequate ventilation to keep the exposure levels below the OELS. Follow safe handling advice and personal protective equipment recommendations.

**Environmental precautions**

**Environmental precautions** Vapors can accumulate in low areas. Report spills as required by local and federal regulations. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system. Should not be released into the environment.

**Methods and materials for containment and cleaning up**

**Methods for Containment** Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains.

**Methods for cleaning up**

Soak up with inert absorbent material. Contain liquid and collect with an inert, non-combustible material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water. Prevent product from entering drains. Take precautionary measures against static discharges.

## 7. HANDLING AND STORAGE

**Precautions for safe handling****Advice on safe handling**

Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Keep away from open flames, hot surfaces and sources of ignition. Handle in accordance with good industrial hygiene and safety practice. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

**Conditions for safe storage, including any incompatibilities****Technical measures/Storage conditions**

Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces, and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children. Store locked up. Keep cool.

**Incompatible products**

Strong acids, alkalis, oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-BUTOXYETHANOL 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup> (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m <sup>3</sup> (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m <sup>3</sup>
ETHYLENE GLYCOL 107-21-1	Ceiling: 100 mg/m <sup>3</sup> aerosol only	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m <sup>3</sup>	-
ETHYLENE OXIDE 75-21-8	TWA: 1 ppm	TWA: 1 ppm STEL: 5 ppm see 29 CFR 1910.1047	IDLH: 800 ppm Ceiling: 5 ppm 10 min/day Ceiling: 9 mg/m <sup>3</sup> 10 min/day TWA: 0.1 ppm less than stated value TWA: 0.18 mg/m <sup>3</sup> less than stated value
1,4-DIOXANE 123-91-1	TWA: 20 ppm Skin - potential significant contribution to overall exposure by the cutaneous route	TWA: 100 ppm TWA: 360 mg/m <sup>3</sup> (vacated) TWA: 25 ppm (vacated) TWA: 90 mg/m <sup>3</sup> (vacated) S* S*	IDLH: 500 ppm Ceiling: 1 ppm 30 min Ceiling: 3.6 mg/m <sup>3</sup> 30 min

ACGIH: (American Conference of Governmental Industrial Hygienists)

OSHA: (Occupational Safety & Health Administration)

NIOSH IDLH: Immediately Dangerous to Life or Health

**Other Exposure Guidelines**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Exposure controls****Engineering Measures**

Ventilation systems. Use adequate ventilation to keep the exposure levels below the occupational exposure limits.

**Individual protection measures, such as personal protective equipment**

<b>Eye/Face Protection</b>	Tightly fitting safety goggles.
<b>Skin and body protection</b>	Chemical resistant apron. Protective gloves.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
<b>Hygiene measures</b>	When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical and chemical properties

<b>Physical state</b>	Liquid	<b>Odor</b>	Ammonia
<b>Appearance</b>	Clear	<b>Odor Threshold</b>	
<b>Color</b>	Clear		

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
<b>pH</b>	11	+/- 0.50
<b>Melting/freezing point</b>	No information available	
<b>Boiling point/boiling range</b>		
<b>Flash Point</b>	68-70 °C / 154-158 °F	(based on components)
<b>Evaporation rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limits in Air</b>		
upper flammability limit		
lower flammability limit		
<b>Vapor pressure</b>		
<b>Vapor density</b>		
<b>Specific Gravity</b>	.995	
<b>Water solubility</b>	Soluble in Water	
<b>Partition coefficient: n-octanol/water</b>		
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>		
<b>Viscosity</b>	No information available	
<b>Explosive properties</b>		

### Other information

<b>VOC Content(%)</b>	6
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## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

### Conditions to Avoid

Heat, flames and sparks.

### Incompatible Materials

Strong acids, alkalis, oxidizing agents.

**Hazardous Decomposition Products**

Carbon oxides , Hydrocarbons, Fumes.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

<b>Inhalation</b>	Avoid inhaling vapors or mists. May cause irritation to respiratory system.
<b>Eye contact</b>	Eye irritation may occur if excessive exposure to product occurs.
<b>Skin contact</b>	Skin irritation may occur if person excessively exposes product to the skin.
<b>Ingestion</b>	Not acutely toxic. May be harmful if swallowed.

**Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
2-BUTOXYETHANOL 111-76-2	= 470 mg/kg ( Rat )	= 99 mg/kg ( Rabbit )	= 450 ppm ( Rat ) 4 h
ETHYLENE GLYCOL 107-21-1	= 4700 mg/kg ( Rat )	= 10600 mg/kg ( Rat )	-
ETHYLENE OXIDE 75-21-8	= 72 mg/kg ( Rat )	-	= 800 ppm ( Rat ) 4 h
1,4-DIOXANE 123-91-1	= 5170 mg/kg ( Rat )	= 7600 µL/kg ( Rabbit )	= 46 mg/L ( Rat ) 2 h

**Information on toxicological effects**

**Symptoms** Excessive exposure to the product may result in eye, skin, or respiratory irritation. Under normal conditions of intended use, this product does not pose a risk to health.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	Under normal conditions there is no skin irritation. Excessive exposure of product with skin may cause skin irritation.
<b>Eye damage/irritation</b>	Under normal conditions there is no eye irritation . Excessive conditions to product may cause eye irritation.
<b>Sensitization</b>	Not a known sensitizer.
<b>Germ Cell Mutagenicity</b>	Not a germ cell mutagen.
<b>Carcinogenicity</b>	The table below indicates whether each agency has evaluated a listed ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
2-BUTOXYETHANOL 111-76-2	-	Group 3	-	-
ETHYLENE OXIDE 75-21-8	A2	Group 1	Known	X
1,4-DIOXANE 123-91-1	A3	Group 2B	Reasonably Anticipated	X

ACGIH: (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

A2 - Suspected Human Carcinogen

IARC: (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to Carcinogenicity in Humans

Group 2B - Possibly Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 1 - Carcinogenic to Humans

NTP: (National Toxicity Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

**Reproductive toxicity**

The product contains no substances known to be hazardous to health in concentrations which need to be taken into account.

<b>Specific target organ systemic toxicity (single exposure)</b>	None under normal use conditions.
<b>Specific target organ systemic toxicity (repeated exposure)</b>	None under normal use conditions.
<b>Chronic toxicity</b>	Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest.
<b>Target Organ Effects</b>	No known effects under normal use conditions.
<b>Neurological effects</b>	Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.
<b>Aspiration hazard</b>	No known effect based on information supplied.

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity** 0% of the mixture consists of ingredient(s) of unknown toxicity.

**The following values are calculated based on chapter 3.1 of the GHS document .**

<b>ATEmix (oral)</b>	7912 mg/kg
<b>ATEmix (dermal)</b>	18519 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	25.3 mg/l
<b>ATEmix (inhalation-vapor)</b>	51 mg/l

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
2-BUTOXYETHANOL 111-76-2	-	1490 mg/L LC50 Lepomis macrochirus 96h static 2950 mg/L LC50 Lepomis macrochirus 96h	-	1000 mg/L EC50 Daphnia magna 48h
ETHYLENE GLYCOL 107-21-1	6500 - 13000 mg/L EC50 Pseudokirchneriella subcapitata 96h	41000 mg/L LC50 Oncorhynchus mykiss 96h 14 - 18 mL/L LC50 Oncorhynchus mykiss 96h static 27540 mg/L LC50 Lepomis macrochirus 96h static 40761 mg/L LC50 Oncorhynchus mykiss 96h static 40000 - 60000 mg/L LC50 Pimephales promelas 96h static 16000 mg/L LC50 Poecilia reticulata 96h static	-	46300 mg/L EC50 Daphnia magna 48h
ETHYLENE OXIDE 75-21-8	-	73 - 96 mg/L LC50 Pimephales promelas 96h	-	137 - 300 mg/L LC50 Daphnia magna 48h
1,4-DIOXANE 123-91-1	-	10000 mg/L LC50 Lepomis macrochirus 96h static 10000 mg/L LC50 Lepomis macrochirus 96h semi-static 9850 mg/L LC50 Pimephales promelas 96h flow-through 10306 - 14742 mg/L LC50 Pimephales promelas 96h static 9850 mg/L LC50 Pimephales promelas 96h	-	163 mg/L EC50 water flea 48h Static

**Persistence and degradability**

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**Bioaccumulation**

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Chemical Name	log Pow
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2-BUTOXYETHANOL 111-76-2	0.81
ETHYLENE GLYCOL 107-21-1	-1.93
ETHYLENE OXIDE 75-21-8	-0.3
1,4-DIOXANE 123-91-1	-0.42

**Other adverse effects** No information available

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment

#### **Waste Disposal Methods**

Dispose of in accordance with federal, state, and local regulations. This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Dispose of in accordance with federal, state, and local regulations.

#### **Contaminated packaging**

Do not re-use empty containers.

### 14. TRANSPORT INFORMATION

#### **DOT Ground**

NOT REGULATED AS DANGEROUS GOODS.

#### **IATA**

NOT REGULATED AS DANGEROUS GOODS.

#### **IMDG**

NOT REGULATED AS DANGEROUS GOODS.

### 15. REGULATORY INFORMATION

#### International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
2-BUTOXYETHANOL	X	X	X	X	X	X	X	X
ETHYLENE GLYCOL	X	X	X	X	X	X	X	X
ETHYLENE OXIDE	X	X	X	X	X	X	X	X
1,4-DIOXANE	X	X	X	X	X	X	X	X

#### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**CHINA** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

#### U.S. Federal Regulations



**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does contain a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %*	SARA 313 - Threshold Values %
2-BUTOXYETHANOL - 111-76-2	111-76-2	1-10	1.0
ETHYLENE GLYCOL - 107-21-1	107-21-1	<0.1	1.0
1,4-DIOXANE - 123-91-1	123-91-1	<0.00001	0.1
ETHYLENE OXIDE - 75-21-8	75-21-8	<0.00001	0.1

**SARA 311/312 Hazard Categories**

Acute Health Hazard	Yes
Chronic Health Star Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does contain substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
ETHYLENE GLYCOL 107-21-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
ETHYLENE OXIDE 75-21-8	10 lb	10 lb	RQ 10 lb final RQ RQ 4.54 kg final RQ
1,4-DIOXANE 123-91-1	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

**U.S. State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals:

Ethylene Glycol CAS # 107-21-1) is considered a Proposition 65 chemical for developmental only when ingested. The purpose of this product is not for ingestion .



This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Chemical Name	California Prop. 65
ETHYLENE GLYCOL - 107-21-1	Developmental (ingested) <0.1%
1,4-DIOXANE - 123-91-1	Cancer <0.00001%
ETHYLENE OXIDE - 75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive <0.0001%

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
2-BUTOXYETHANOL 111-76-2	X	X	X
ETHYLENE GLYCOL 107-21-1	X	X	X
ETHYLENE OXIDE 75-21-8	X	X	X
1,4-DIOXANE 123-91-1	X	X	X

EPA Pesticide Registration Number Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

<b>16. OTHER INFORMATION</b>
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<b>NFPA</b>	<b>Health Hazard 2</b>	<b>Flammability 1</b>	<b>Instability 0</b>	<b>Physical and chemical hazards -</b>
<b>HMIS</b>	<b>Health Hazard 2*</b>	<b>Flammability 1</b>	<b>Physical Hazard 0</b>	<b>Personal protection B</b>
<i>Chronic Hazard Star Legend</i>		<i>Repeated or prolonged exposure may cause central nervous system damage</i>		

**Prepared By** American Jetway  
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Wayne, MI 48184  
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**Issuing date** 28-Sep-2017  
**Revision Date** 01-May-2018  
**Revision Note**

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

**End of Safety Data Sheet**