

SAFETY DATA SHEET.

Issuing date 28-Sep-2017

Revision Date 19-Mar-2019

Version 2.01

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

Product identifier

Product name 4640-0 GALLON GLASS CLEANER

Recommended use of the chemical and restrictions on use

Product code F01661

Product Type Non-flammable 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

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

GHS Label elements, including precautionary statements

Emergency Overview

DANGER

Hazard Statements

Causes severe skin burns and eye damage.



Appearance Clear

Physical state Liquid

Odor Ammonia

Precautionary Statements - Prevention

Do not breathe dust, fume, gas, mist, vapors, spray.

Wash face, hands and any exposed skin thoroughly after handling.

Wear protective gloves, protective clothing, eye protection, face protection.

Precautionary Statements - Response

Specific treatment (see first aid on this label).

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER, doctor, physician.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water, shower. Wash contaminated clothing before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Immediately call a POISON CENTER, doctor, physician.

IF SWALLOWED: Rinse Mouth. Do NOT induce vomiting.

Precautionary Statements - Storage

Store locked up.

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 %*
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2-BUTOXYETHANOL	111-76-2	1-10
AMMONIA	1336-21-6	<1
ETHYLENE GLYCOL	107-21-1	<0.1

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

4. FIRST AID MEASURES

First aid measures for different exposure routes

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

Most important symptoms/effects, acute and delayed

Main Symptoms Causes severe skin burns and serious eye damage.

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. Foam.Carbon dioxide (CO2). Cool containers/tanks with water spray.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire. Keep away from sources of ignition - No smoking.

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition. The product causes burns of eyes, skin and mucous membranes. In the event of fire and/or explosion do not breathe fumes.

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 flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water 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 inter, 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.

Incompatible products Strong acids, alkalis, oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines . Under most handling conditions, this product will not generate mist or dust. In most aconditions, no special ventilation is nedded .General ventilation is recommended. If the product is heated above 150 C or atomized ventilation should be use.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-BUTOXYETHANOL 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m ³ (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m ³
ETHYLENE GLYCOL 107-21-1	STEL: 50 ppm vapor fraction STEL: 10 mg/m ³ inhalable particulate matter, aerosol only TWA: 25 ppm vapor fraction	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m ³	-

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

Eye/Face Protection Tightly fitting safety goggles.

Skin and body protection Chemical resistant apron. Protective gloves.

Respiratory protection 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.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state	Liquid		
Appearance	Clear	Odor	Ammonia
Color	Colorless	Odor Threshold	

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	11.0	+/- 0.50
Melting/freezing point	No information available	
Boiling point/boiling range		
Flash Point	Not Applicable	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
upper flammability limit		
lower flammability limit		
Vapor pressure		
Vapor density		
Specific Gravity	0.990	
Water solubility	Infinite	
Partition coefficient: n-octanol/water		
Autoignition temperature	No information available	
Decomposition temperature		
Viscosity	No information available	
Explosive properties		

Other information

VOC Content(%) 2.8

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. Exposure to air or moisture over prolonged periods.

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**

Inhalation	Respiratory irritation may occur if excessive exposure to product by inhalation.
Eye contact	Causes serious eye damage.
Skin contact	Causes severe skin burns.
Ingestion	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 = 486 ppm (Rat) 4 h
AMMONIA 1336-21-6	= 350 mg/kg (Rat)	-	-
ETHYLENE GLYCOL 107-21-1	= 4700 mg/kg (Rat)	= 10600 mg/kg (Rat)	-

Information on toxicological effects

Symptoms Causes severe skin burns. Causes serious eye damage.

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

Skin corrosion/irritation	Causes severe burns. Irritating to skin.
Eye damage/irritation	Causes serious eye damage. Irritating to eyes.
Corrosivity	Causes severe burns. Causes serious eye damage.
Sensitization	Not a known sensitizer.
Germ cell mutagenicity	Not a germ cell mutagen.
Carcinogenicity	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	A3	Group 3	-	-

Legend:

ACGIH: (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity	This product does not contain any known or suspected reproductive hazards.
Specific target organ systemic toxicity (single exposure)	No known effect based on information supplied.
Specific target organ systemic toxicity (repeated exposure)	No known effect based on information supplied.
Chronic toxicity	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.
Target Organ Effects	No known effects under normal use conditions.
Neurological effects	Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.
Aspiration hazard	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 .

ATEmix (oral)	16955 mg/kg
ATEmix (dermal)	39682 mg/kg
ATEmix (inhalation-gas)	198334 mg/l
ATEmix (inhalation-dust/mist)	54.1 mg/l
ATEmix (inhalation-vapor)	108.2 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
AMMONIA 1336-21-6	-	8.2 mg/L LC50 Pimephales promelas 96h	-	0.66 mg/L EC50 water flea 48h 0.66 mg/L EC50 Daphnia pulex 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

Persistence and degradability

In soil, siloxanes are degraded.

Bioaccumulation

Not likely to bioaccumulate.

Chemical Name	log Pow
2-BUTOXYETHANOL 111-76-2	0.81
ETHYLENE GLYCOL 107-21-1	-1.93

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment****Waste Disposal Methods**

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. Dispose of in accordance with federal, state, and local regulations. Dispose of in accordance with local regulations.

Contaminated packaging

Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Ground NOT REGULATED

IATA NOT REGULATED

IMDG NOT REGULATED

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
AMMONIA	X	X	X	X	X	X	X	X
ETHYLENE GLYCOL	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	2.772	1.0
AMMONIA - 1336-21-6	1336-21-6	<1	1.0
ETHYLENE GLYCOL - 107-21-1	107-21-1	<0.1	1.0

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 contain the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
AMMONIA	1000 lb			X

1336-21-6				
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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
AMMONIA 1336-21-6	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
ETHYLENE GLYCOL 107-21-1	5000 lb		RQ 5000 lb final RQ RQ 2270 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. There is no Proposition 65 warning required for Ethylene Glycol.



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

Chemical Name	California Prop. 65
ETHYLENE GLYCOL - 107-21-1	Developmental (ingested) <0.1%

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
DEIONIZED WATER 7732-18-5			X
2-BUTOXYETHANOL 111-76-2	X	X	X
AMMONIA 1336-21-6	X	X	X
ETHYLENE GLYCOL 107-21-1	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.

16. OTHER INFORMATION

NFPA	Health Hazard 2	Flammability 1	Instability 0	Physical and chemical hazards -
HMIS	Health Hazard 2	Flammability 1	Physical Hazard 0	Personal protection B

Prepared By American Jetway Corporation
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	Wayne, MI 48184-0126
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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