



Material Safety Data Sheet

Issuing date 18-Oct-2011

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Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product name Swisher Glass Cleaner
Product code 41825
UN/ID No UN1950
Recommended Use Aerosol Glass Cleaner

Distributor
Swisher Hygiene Inc.
4725 Piedmont Row Drive,
Suite 400,
Charlotte, NC 28210

Chemical Emergency Phone Number 800-424-9300 (Chemtrec)

Company Emergency Phone Number 800-444-4138

2. HAZARDS IDENTIFICATION

Emergency Overview

Aerosol. CONTENTS UNDER PRESSURE

Prolonged exposure may cause chronic effects. May be ignited by heat, sparks or flames

Appearance Compressed liquefied gas. **Physical state** liquid. **Odor** Butyl Odor

Potential Health Effects

Principle Routes of Exposure Skin contact Ingestion

Acute toxicity

Eyes

Health injuries are not known or expected under normal use.

Skin

May be harmful if absorbed through skin Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis

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

Chronic Effects

Unconsciousness. Cyanosis (blue tissue condition, nails, lips, and/or skin). May be harmful if absorbed through skin. Liver injury may occur. Kidney injury may occur. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Main Symptoms

Cyanosis (blue tissue condition, nails, lips, and/or skin). Liver enlargement. Jaundice. Defatting of the skin. Skin irritation.

Aggravated Medical Conditions	None known.
Interactions with Other Chemicals	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.
Environmental hazard	See Section 12 for additional Ecological Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical Name	CAS-No	Weight %
N-Butane	106-97-8	1-3
2-Butoxyethanol	111-76-2	1-3
Ethyl alcohol	64-17-5	1-3
Propane	74-98-6	1-3

4. FIRST AID MEASURES

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 and persists.
Inhalation	Remove to fresh air. Seek medical attention if symptoms persist.
Ingestion	If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. If ingestion of a large amount does occur, call a poison control center immediately.
Notes to physician	In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Heat may cause the containers to explode. Vapor or gas may spread to distant ignition sources and flash back. Runoff to sewer may cause fire or explosion hazard.
Flash point	Flash point -156 °F -104.4 °C
Suitable Extinguishing Media	Water Fog, Foam, CO2 or Dry Chemical.
Hazardous Combustion Products	Irritants. Toxic gas.
Explosion Data	
Sensitivity to Mechanical Impact	none
Sensitivity to Static Discharge	none
Protective Equipment and Precautions for Firefighters	In case of fire and/or explosion do not breathe fumes. Containers should be cooled with water to prevent vapor pressure build up Move containers from fire area if you can do it without risk For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Ensure adequate ventilation
Environmental precautions	Try to prevent the material from entering drains or water courses
Methods for Containment	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas.
Methods for cleaning up	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

7. HANDLING AND STORAGE

Advice on safe handling	KEEP OUT OF REACH OF CHILDREN Pressurized container: Do not pierce or burn, even after use. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not smoke while using or until sprayed surface is thoroughly dry. Use only in area provided with appropriate exhaust ventilation. Do not use if spray button is missing or defective. Do not re-use empty containers. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin. Avoid contact with eyes. Wear personal protective equipment. Avoid prolonged exposure
Technical measures/Storage conditions	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 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. Store in a well-ventilated place. Keep away from food, drink and animal feedingstuffs. Level 1 Aerosol (NFPA 30B).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines Review Section 3 & 4 for Exposure Guidelines.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
N-Butane 106-97-8	TWA: 1000 ppm		TWA: 800 ppm TWA: 1900 mg/m ³
2-Butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m ³
Ethyl alcohol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³
Propane 74-98-6	TWA: 1000 ppm	TWA: 1000 ppm TWA: 1800 mg/m ³	IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m ³

Engineering Measures Showers
Eyewash stations
Ventilation systems

Personal Protective Equipment Institutional Environment

Eye/Face Protection	Safety glasses are suggested when using this product in heavy use and institutional environments.
Consumer Environments	Care should be taken to avoid Eye contact.
Skin and body protection	Rubber gloves
Respiratory protection	Unnecessary in open institutional environment.

Hygiene measures Practice good personal hygiene. Wash after handling.

Personal Protective Equipment Industrial Environment

Eye/Face Protection Splash-proof chemical goggles or face shield.
Skin and body protection Impervious rubber, alkali-proof protective gloves Impervious rubber boots & apron.
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 Practice good personal hygiene. Wash after handling. Shower at end of work period
Practice good personal hygiene. Wash after handling

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	liquid	Odor	Butyl Odor
Appearance	Compressed liquefied gas.	Odor Threshold	No information available
Color	colorless		

Property	Values	Remarks Methods
pH	9.5-10.5	No information available
Melting/freezing point		No information available
Freezing Point		No information available
Boiling point/boiling range	96.1 °C 204.8 °F	No information available
Flash Point	-104.4 °C -156 °F	No information available
Evaporation rate		No information available
Flammability (solid, gas)	3.2733 kJ/g	No information available
Flammability Limits in Air		No information available
upper flammability limit		
lower flammability limit		
Explosion Limits		
upper		
lower		
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity	0.9605	No information available
Water solubility	completely soluble	No information available
Solubility in other solvents		No information available
Partition coefficient: n-octanol/water		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties	No information available	
Oxidizing Properties	No information available	

9.2 Other information

Softening point	No information available
Molecular Weight	No information available
VOC Content(%)	No information available
Density VALUE	0.9604 g/cm ³
Bulk Density VALUE	No information available

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions.

Incompatible products None known based on information supplied

Conditions to Avoid Heat, flames and sparks

Hazardous Decomposition Products Irritants. Toxic gas.

Hazardous Polymerization Hazardous polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplied information.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
N-Butane			658 mg/L (Rat) 4 h
2-Butoxyethanol	470 mg/kg (Rat)	220 mg/kg (Rabbit) 2270 mg/kg (Rat)	2.21 mg/L (Rat) 4 h 450 ppm (Rat) 4 h
Ethyl alcohol	7060 mg/kg (Rat)		124.7 mg/L (Rat) 4 h
Propane			658 mg/L (Rat) 4 h

Chronic toxicity

Chronic toxicity Unconsciousness. Cyanosis (blue tissue condition, nails, lips, and/or skin). May be harmful if absorbed through skin. Liver injury may occur. Kidney injury may occur. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Carcinogenicity Hazardous by OSHA criteria.

Chemical Name	ACGIH	IARC	NTP	OSHA
2-Butoxyethanol	A3	Group 3		
Ethyl alcohol	A3	Group 1	Known	X

Reproductive toxicity Hazardous by OSHA criteria. Possible reproductive hazard.

Target Organ Effects None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components of this product have been identified as having potential environmental concerns.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
2-Butoxyethanol		1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50		1698 - 1940: 24 h Daphnia magna mg/L EC50 >1000: 48 h Daphnia magna mg/L EC50
Ethyl alcohol		12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static 9268 - 14221: 48 h Daphnia magna mg/L LC50

Chemical Name	log Pow
N-Butane	2.89
2-Butoxyethanol	0.81
Ethyl alcohol	0
Propane	2.3

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

Contaminated packaging Do not re-use empty containers

Chemical Name	California Hazardous Waste Status
Ethyl alcohol	Toxic Ignitable

14. TRANSPORT INFORMATION

Note UN1950, Aerosols Flammable, 2.1, PG NA, LTD QTY

Dot Regulated
Proper shipping name UN1950, Aerosols Flammable, 2.1, PG NA, LTD QTY
Hazard class 2.1
UN/ID No UN1950

TDG Not regulated

MEX Not regulated

ICAO Not regulated

ICAO/IATA Not regulated

IMDG / IMO Not regulated

RID Not regulated

ADR/RID Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	TSCA
DSL	Complies
NDSL	Complies
EINECS	Complies
ELINCS	-
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies

AICS Complies

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
IECSC - 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

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

111-76-2 2-Butoxyethanol

1.0 % de minimis concentration (applies to R-(OCH₂CH₂)_n-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)

SARA 311/312 Hazard Categories

Acute Health Hazard	no
Chronic Health Hazard	no
Fire Hazard	Yes
Sudden Release of Pressure Hazard	Yes
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 not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

Chemical Name	California Prop. 65
Ethyl alcohol	Carcinogen Developmental

U.S. State Right-to-Know 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

International Regulations

Chemical Name	Carcinogen Status	Exposure Limits
N-Butane		Mexico: TWA 800 ppm Mexico: TWA 1900 mg/m ³
2-Butoxyethanol		Mexico: TWA 26 ppm Mexico: TWA 120 mg/m ³ Mexico: STEL 75 ppm Mexico: STEL 360 mg/m ³
Ethyl alcohol		Mexico: TWA 1000 ppm Mexico: TWA 1900 mg/m ³

Canada

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

Chemical Name	NPRI
2-Butoxyethanol	X

16. OTHER INFORMATION

Prepared By Swisher Hygiene Inc.
4725 Piedmont Row Drive
Suite 400
Charlotte, NC 28210

Issuing date 18-Oct-2011

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Revision Note No information available

Disclaimer

The information provided on this MSDS 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 Material Safety Data Sheet