

SAFETY DATA SHEET

1. Identification

Product number 1000000070

Product identifier RETAIL GLASS CLEANER

Revision date 07-27-2016
Company information SPRAYWAY INC.

1005 S Westgate Drive

Addison, IL 60101 United States

Company phone General Assistance 1-630-628-3000

Emergency telephone US 1-866-836-8855 Emergency telephone outside 1-952-852-4646

US Version #

Supersedes date 11

Recommended use 11-11-2015
Recommended restrictions cleaner
None known.

2. Hazard(s) identification

Physical hazards

Health hazards Gases under pressure

OSHA defined hazards Not classified.

Label elements Not classified.



Signal word Warning

Hazard statement Contains gas under pressure; may explode if heated.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response If exposed or concerned: Get medical advice/attention.

Storage Protect from sunlight. Store in a well-ventilated place.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Liquefied gas

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
2-Butoxyethanol		111-76-2	2.5 - 10
Ethyl Alcohol		64-17-5	2.5 - 10
Butane		106-97-8	1 - 2.5
Propane		74-98-6	1 - 2.5
Other components below reportable levels			90 - 100

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

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4. First-aid measures

Move to fresh air. Call a physician if symptoms develop or persist. Inhalation

No adverse effects due to skin contact are expected. Skin contact

None known.

Eye contact No specific first aid measures noted. Ingestion Not likely, due to the form of the product.

Most important

symptoms/effects, acute and delayed

Indication of immediate

medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

Direct contact with eyes may cause temporary irritation.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters

Fire fighting equipment/instructions

Specific methods

During fire, gases hazardous to health may be formed.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose

holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Cool containers exposed to flames with water until well after the fire is out.

Contents under pressure. Pressurized container may explode when exposed to heat or flame. General fire hazards

6. Accidental release measures

Personal precautions. protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. For waste disposal, see section 13 of the SDS

Avoid discharge into drains, water courses or onto the ground. Environmental precautions

7. Handling and storage

Precautions for safe handling

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Ground and bond containers when transferring material. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders. Suck back of water into the container must be prevented. Do not allow backfeed into the container. Purge air from system before introducing gas. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Do not re-use empty containers. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

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Conditions for safe storage, including any incompatibilities Level 1 Aerosol.

Contents under pressure. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Stored containers should be periodically checked for general condition and leakage. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational	exposure	limits

Components	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	PEL	240 mg/m3	
*		50 ppm	
Ethyl Alcohol (CAS 64-17-5)	PEL	1900 mg/m3	
		1000 ppm	
Propane (CAS 74-98-6)	PEL	1800 mg/m3	
		1000 ppm	
JS. ACGIH Threshold Limit Valu	es		
Components	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	TWA	20 ppm	
Butane (CAS 106-97-8)	STEL	1000 ppm	
Ethyl Alcohol (CAS 64-17-5)	STEL	1000 ppm	
US. NIOSH: Pocket Guide to Che	emical Hazards		
Components	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	TWA	24 mg/m3	
		5 ppm	
Butane (CAS 106-97-8)	TWA	1900 mg/m3	
		800 ppm	
Ethyl Alcohol (CAS 64-17-5)	TWA	1900 mg/m3	
		1000 ppm	
Propane (CAS 74-98-6)	TWA	1800 mg/m3	
		1000 ppm	
ogical limit values			
ACGIH Biological Exposure Indi	ces		
Components Value	Determinant	Specimen Sampling Time	

Bio

Components	Value	Determinant	Specimen	Sampling Time
2-Butoxyethanol (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*

^{* -} For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2)

Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

2-Butoxyethanol (CAS 111-76-2)

Skin designation applies.

US - Tennessee OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2)

Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

2-Butoxyethanol (CAS 111-76-2)

Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

2-Butoxyethanol (CAS 111-76-2)

Can be absorbed through the skin.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If

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exposure limits have not been established, maintain airborne levels to an acceptable level.

SDS US 3/10 Individual protection measures, such as personal protective equipment

Wear safety glasses with side shields (or goggles). Eye/face protection

Skin protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove Hand protection

supplier.

Wear suitable protective clothing.

If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an Respiratory protection

air-supplied respirator.

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work

clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state

Form Aerosol. Liquefied gas.

Not available. Color Not available.

Odor Not available. Odor threshold

9.1 - 10.1 estimated рН

Melting point/freezing point Not available.

Initial boiling point and boiling

212 °F (100 °C) estimated

range

-156.0 °F (-104.4 °C) Propellant estimated Flash point

Not available. Evaporation rate Not available. Flammability (solid, gas) Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper Not available.

Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available.

80 - 100 psig @70F estimated Vapor pressure

Vapor density Not available. Not available. Relative density

Solubility(ies)

Solubility (water) Not available. Partition coefficient Not available.

(n-octanol/water)

Not available. Auto-ignition temperature Not available. Decomposition temperature Not available. Viscosity

Other information

Aerosol spray enclosed space

> 2.52 g/cm3 Tested Deflagration density Aerosol spray ignition < 15 cm Tested estimated

distance

Not explosive. Explosive properties Oxidizing properties Not oxidizing. 0.977 - 0.997 Specific gravity

VOC (Weight %)

9.5 % estimated

10. Stability and reactivity

Reactivity Chemical

The product is stable and non-reactive under normal conditions of use, storage and transport.

stability Possibility of

Material is stable under normal conditions.

hazardous

Hazardous polymerization does not occur.

reactions Conditions to avoid Incompatible

Heat. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

materials

Strong oxidizing agents.

Hazardous decomposition products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation

Prolonged inhalation may be harmful.

Skin contact

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and

1355 mg/l

prolonged. These effects have not been observed in humans.

Eye contact

Direct contact with eyes may cause temporary irritation.

Ingestion

Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Test Results Components Species 2-Butoxyethanol (CAS 111-76-2) Acute Dermal 7.3 ml/kg, 4 Days LD50 Guinea pig 0.23 ml/kg, 24 Hours Rabbit 435 mg/kg, 24 Hours 0.68 ml/kg, 24 Hours 0.63 ml/kg Rat > 2000 mg/kg, 24 Hours Inhalation 400 ppm, 7 Hours LC50 Rabbit 450 ppm, 4 Hours Rat Oral LD100 Rabbit 695 mg/kg LD50 Dog > 695 mg/kg 1414 mg/kg Guinea pig 1519 mg/kg Mouse Rat 1746 mg/kg Butane (CAS 106-97-8) Acute Inhalation LC50 Mouse 1237 mg/l, 120 Minutes 52 %, 120 Minutes

Rat

Components	Species	Test Results	
Ethyl Alcohol (CAS 64-17-5)			
<u>Acute</u>			
Inhalation			
LC50	Cat	85.41 mg/l, 4.5 Hours	
		43.68 mg/l, 6 Hours	
	Mouse	> 60000 ppm	
		79.43 mg/l, 134 Minutes	
	Rat	> 115.9 mg/l, 4 Hours	
		51.3 mg/l, 6 Hours	
Oral			
LD50	Monkey	6000 mg/kg	
	Mouse	10500 ml/kg	
	Pig	> 5000 mg/kg	
	Rat	10470 mg/kg	
		7800 ml/kg	
Propane (CAS 74-98-6)		-	
Acute			
Inhalation			
LC50	Mouse	1237 mg/l, 120 Minutes	
		52 %, 120 Minutes	
	Rat	1355 mg/l	
		658 mg/l/4h	
	be based on additional component data not sho		
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.		
Serious eye damage/eye irritation	Direct contact with eyes may cause tempora	ary irritation.	
Respiratory or skin sensitizati			
Respiratory sensitization	Not a respiratory sensitizer.		
Skin sensitization	This product is not expected to cause skin sensitization.		

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

2-Butoxyethanol (CAS 111-76-2)

3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard

Not likely, due to the form of the product.

Chronic effects

May be harmful if absorbed through skin. Prolonged inhalation may be harmful.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and

prolonged. These effects have not been observed in humans.

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12. Ecological information

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

	Species	Test Results
EC50	Daphnia	13838.1602 mg/l, 48 hours estimated
	Species	Test Results
111-76-2)		
LC50	Inland silverside (Menidia beryllina)	1250 mg/l, 96 hours
17-5)		
EC50	Water flea (Daphnia magna)	7700 - 11200 mg/l, 48 hours
LC50	Fathead minnow (Pimephales promelas)	> 100 1 mg/L 96 hours
	LC50 LC50 EC50	EC50 Daphnia Species I11-76-2) LC50 Inland silverside (Menidia beryllina) I7-5) EC50 Water flea (Daphnia magna)

^{*} Estimates for product may be based on additional component data not shown.

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

2-Butoxyethanol 0.83 Butane 2 89 Ethyl Alcohol -0.31 Propane 2.36

Mobility in soil

No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance

with local/regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal. Do not re-use empty containers.

14. Transport information

DOT

UN1950 **UN** number Aerosols UN proper shipping name

Transport hazard class(es)

Class 2.2 Subsidiary risk Label(s) 2.2

Packing group Not applicable.

Packaging exceptions

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Packaging non bulk Packaging bulk

None None

IATA

UN1950 **UN** number

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UN proper shipping name

Aerosols, non-flammable

Transport hazard class(es)

Class 2.2 Subsidiary risk 2.2 Label(s) Packing

group Environmental Not applicable.

hazards ERG Code No. Special precautions for user

Other information

Passenger and cargo

Allowed with restrictions.

aircraft Cargo aircraft only

Packaging Exceptions

Allowed with restrictions.

Read safety instructions, SDS and emergency procedures before handling.

IMDG

LTD QTY

UN number

UN proper shipping name Transport hazard class(es) UN1950 **AEROSOLS**

Class

Subsidiary risk Label(s) Packing

2.2

group Environmental

2.2

hazards

Not applicable.

Marine pollutant

EmS

No.

Special precautions for user Not available.

Packaging Exceptions Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to LTD QTY Annex II of MARPOL 73/78 and

Not applicable.

the IBC Code

DOT



IATA; IMDG



General information

Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers: Ensure that containers are firmly secured. Ensure cylinder valve is closed and not leaking. Ensure valve outlet cap nut or plug (where provided) is correctly fitted. Ensure valve provided) is correctly fitted. Ensure valve provided) is correctly fitted. Ensure adequate ventilation. Ensure compliance with applicable regulations.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - Yes Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

No

chemical

SARA 313 (TRI reporting)

Chemical name

CAS number

% by wt.

2-Butoxyethanol

111-76-2

2.5 - 10

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

Safe Drinking Water Act Not regulated.

(SDWA)

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.

(a))

2-Butoxyethanol (CAS 111-76-2)

Butane (CAS 106-97-8)

US. Massachusetts RTK - Substance List

2-Butoxyethanol (CAS 111-76-2)

Butane (CAS 106-97-8)

Ethyl Alcohol (CAS 64-17-5)

Propane (CAS 74-98-6)

US. New Jersey Worker and Community Right-to-Know Act

2-Butoxyethanol (CAS 111-76-2)

Butane (CAS 106-97-8)

Ethyl Alcohol (CAS 64-17-5)

Propane (CAS 74-98-6)

US. Pennsylvania Worker and Community Right-to-Know Law

2-Butoxyethanol (CAS 111-76-2)

Butane (CAS 106-97-8)

Ethyl Alcohol (CAS 64-17-5)

Propane (CAS 74-98-6)

US. Rhode Island RTK

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	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) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date

07-11-2015

Revision date

07-27-2016

Version #

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Disclaimer

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.

Revision information

Product and Company Identification: Alternate Trade Names