

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 050-004

Product name Glass Cleaner

Effective date 16-Mar-2012

Company information Sprayway, Inc.

1005 Westgate Addison, IL 60101 United States

 Company phone
 1-630-543-7600

 Emergency telephone US
 1-866-836-8855

 Emergency telephone outside US
 1-952-852-4646

Version # 26

Supersedes date03-Jan-2012Product useGlass cleaner

2. Hazards Identification

Emergency overview Aerosol. CONTENTS UNDER PRESSURE.

May be ignited by heat, sparks or flames.

Potential health effects

Routes of exposure Skin contact. Ingestion.

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.

InhalationIntentional misuse by concentrating and inhaling the product can be harmful or fatal.IngestionExposure 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.

Chronic effects Unconsciousness. Cyanosis (blue tissue condition, nails, lips, and/or skin). May be

harmful if absorbed through skin. Frequent or prolonged contact may defat and dry the

skin, leading to discomfort and dermatitis.

Signs and symptoms Cyanosis (blue tissue condition, nails, lips, and/or skin). Defatting of the skin. Skin

irritation.

3. Composition / Information on Ingredients

Components	CAS#	Percent
Ethyl Alcohol	64-17-5	1 - 3
2-Butoxyethanol	111-76-2	1 - 3
Propane	74-98-6	1 - 3
n-Butane	106-97-8	1 - 3
Non-hazardous and other components below reportable levels	> 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 and persists.

Inhalation If symptoms develop move victim to fresh air. Get medical attention if symptoms occur.

Product name: Gleme Glass Cleaner MSDS US

Product #: 050-Glass Cleaner

Ingestion

Notes to physician

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.

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.

Extinguishing media

Suitable extinguishing media

Protection of firefighters

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

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 so 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.

6. Accidental Release Measures

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

Should not be released into the environment.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

7. Handling and Storage

Handling

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.

Storage

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)

Not established

Not established

8. Exposure Controls / Personal Protection

Exposure limits

Α	\sim	^		
Δ		(<u>-</u>		-
\boldsymbol{n}	•	v		

7.00111				
Components	CAS#	TWA	STEL	Ceiling
Ethyl Alcohol	64-17-5	1000 ppm	1000 ppm	Not established
2-Butoxyethanol	111-76-2	20 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
Ethyl Alcohol	64-17-5	1000 ppm	Not established	Not established

Personal protective equipment

2-Butoxyethanol

Propane

Eye / face protection Not normally needed.

111-76-2

74-98-6

Skin protection Chemical resistant gloves. Wear appropriate chemical resistant clothing.

50 ppm 1000 ppm

Product name: Gleme Glass Cleaner

MSDS US Product #: 050-Glass Cleaner

Not established

Not established

Respiratory protection

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

Compressed liquefied gas. **Appearance** 206.6 °F (97.2 °C) estimated **Boiling point**

Color Colorless.

0.9604 g/cm3 estimated Density Flammability (HOC) 3.2733 kJ/g estimated

Flash back

Flash point -156 °F (-104.4 °C) Propellant

Aerosol. Form Not available Freezing point

Butyl Odor 9.5 - 10.5Ηq Physical state Liquid.

70 - 90 psig @ 70F **Pressure** Solubility Completely 0.9605 estimated Specific gravity

10. Chemical Stability & Reactivity Information

Conditions to avoid Heat, flames and sparks.

Incompatible materials None known. Hazardous decomposition products Irritants.

11. Toxicological Information

Acute effects Acute LD50: 7571 mg/kg estimated, Rat, Dermal

Component analysis - LD50

Toxicology Data - Selected LD50s and LC50s

2-Butoxyethanol 111-76-2 Inhalation LC50 Rat 2.21 mg/L 4 h; Inhalation LC50 Rat 450 ppm 4 h; Oral LD50 Rat

470 mg/kg; Dermal LD50 Rat 2270 mg/kg; Dermal LD50 Rabbit 220 mg/kg

Ethyl Alcohol 64-17-5 Oral LD50 Rat 7060 mg/kg; Inhalation LC50 Rat 124.7 mg/L 4 h

n-Butane 106-97-8 Inhalation LC50 Rat 658 mg/L 4 h 74-98-6 Inhalation LC50 Rat 658 mg/L 4 h Propane Sensitization Not expected to be hazardous by OSHA criteria.

Carcinogenicity

IARC - Group 1 (Carcinogenic to Humans)

Ethyl Alcohol Monograph 100E [in preparation] (in alcoholic beverages); Monograph 96 [2010] (in

alcoholic beverages)

Teratogenicity Not expected to be hazardous by OSHA criteria.

12. Ecological Information

Components of this product have been identified as having potential environmental **Ecotoxicity**

concerns.

LC50 36327 mg/L, Fish, 96.00 Hours, EC50 26428 mg/L, Daphnia, 48.00 Hours, IC50 11902 mg/L, Algae, 72.00 Hours,

13. Disposal Considerations

Disposal instructions

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.

Product name: Gleme Glass Cleaner

14. Transport Information

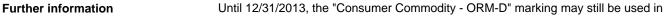
Department of Transportation (DOT) Requirements

Basic shipping requirements:

Proper shipping name Aerosols **Hazard class** 2.1 **UN** number UN1950

Additional information:

153, N82 Special provisions LTD QTY Packaging exceptions None Packaging non bulk Packaging bulk None



place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/13 and may be used now in place of the "Consumer Commodity ORM-D" marking but not

concurrently.

IMDG

Basic shipping requirements:

AEROSOLS Proper shipping name

2.1 **Hazard class UN number** 1950

Additional information:

Packaging exceptions LTD QTY 5F Item Labels required None **Transport Category** 2

IATA

Basic shipping requirements:

Proper shipping name Aerosols, flammable

Hazard class 2.1 **UN** number 1950

Additional information:

LTD QTY Packaging exceptions 2.1 Labels required





15. Regulatory Information

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-(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)

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous

chemical

CERCLA (Superfund) reportable quantity

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 302 extremely No

hazardous substance

Section 311 hazardous chemical Yes

Product name: Gleme Glass Cleaner MSDS US Hazard categories (311/312) Immediate Hazard - Yes

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

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)	No
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

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings Health: 1

Flammability: 2 Physical hazard: 0

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. The information in the sheet was written based on the best knowledge and experience currently available. 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 and The information in the sheet was written based

on the best knowledge and experience currently available.

MSDS sections updated Product and Company Identification: Product and Company Identification

Hazards Identification: Emergency overview Hazards Identification: Chronic effects Hazards Identification: Main symptoms Toxicological Information: Carcinogenicity Toxicological Information: Reproductivity Transport Information: Further information

Prepared by Regulatory Compliance