MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number	032-002
Product name	**Fast Open Water Based Screen Opener**
Effective date	25-Jan-2010
Company information	Sprayway Inc 1005 Westgate Drive Addison, IL 60101 United States
Company phone	General Assistance 1-630-628-3000
Emergency telephone US	800-424-9300
Emergency telephone outside US	703-527-3887
Version #	13
Supersedes date	15-Oct-2009

2. Hazards Identification

Emergency overview

Aerosol. CONTENTS UNDER PRESSURE.
Prolonged exposure may cause chronic effects.

Potential health effects

Routes of exposure	Skin contact. Ingestion.
Eyes	Health injuries are not known or expected under normal use.
Skin	This product may be harmful if it is absorbed through the skin. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).
Inhalation	Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Prolonged inhalation may be harmful.
Ingestion	Exposure 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.

Blood. Central nervous system. Liver. Lungs.

Chronic effects

Unconsciousness. May be harmful if absorbed through skin. Liver injury may occur. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage. Prolonged skin contact may defat the skin and produce dermatitis. May cause delayed lung injury.

Signs and symptoms

Discomfort in the chest. Narcosis. Cyanosis. Liver enlargement. Jaundice. Defatting of the skin. Skin irritation.

3. Composition / Information on Ingredients

Components	CAS #	Percent
2-Butoxyethanol	111-76-2	3 - 5
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 or persists.

Inhalation If inhalation of gas/fume/vapor/dust/mist from the material is excessive (air concentration is greater than the TLV or health effects are noticed), immediately remove the affected person(s) to fresh air. Call a physician if symptoms develop or persist.

Ingestion Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.

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

Protection of firefighters

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. Cool containers exposed to flames with water until well after the fire is out. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental Release Measures

Methods for containment Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Stop the flow of material, if this is without risk.

Methods for cleaning up Should not be released into the environment. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly.

7. Handling and Storage

Handling Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure.

Storage Level 1 Aerosol.

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. Avoid exposure to long periods of sunlight. Store in cool place. Store in a well-ventilated place. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH

Components	CAS #	TWA	STEL	Ceiling
2-Butoxyethanol	111-76-2	20 ppm	Not established	Not established
n-Butane	106-97-8	1000 ppm	Not established	Not established

OSHA

Components	CAS #	TWA	STEL	Ceiling
2-Butoxyethanol	111-76-2	50 ppm	Not established	Not established

Personal protective equipment

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

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

Appearance	Compressed liquefied gas.
Boiling point	212 °F (100 °C) estimated
Color	Pale yellow
Flammability (HOC)	3.4153 kJ/g estimated
Flash back	No
Flash point	-156 °F (-104.4 °C) Propellant
Form	Aerosol.
Odor	Pleasant.
pH	11.8 - 12.8
Physical state	Liquid.
Pressure	60 - 75 psig @70F
Solubility	Partially
Specific gravity	0.9783 estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Risk of ignition.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Aluminum. Nitromethane. Strong oxidizing agents. Water. None known.

11. Toxicological Information

Acute effects Acute LD50: 4536 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
n-Butane	106-97-8	Inhalation LC50 Rat 658 mg/L 4 h

Sensitization Not expected to be hazardous by OSHA criteria.

Teratogenicity Not expected to be hazardous by OSHA criteria.

12. Ecological Information

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

LC50 1190 mg/L estimated, Fish, 96.00 Hours,
EC50 17880 mg/L estimated, Daphnia, 48.00 Hours,
IC50 88.19 mg/L estimated, Algae, 72.00 Hours,

13. Disposal Considerations

Waste codes D001: Waste Flammable material with a flash point <140 F
D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]

Disposal instructions Contents under pressure. Do not puncture, incinerate or crush. Dispose of this material and its container at hazardous or special waste collection point. Do not allow this material to drain into sewers/water supplies. If discarded, this product is considered a RCRA ignitable waste, D001.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:	
Proper shipping name	Consumer commodity
Hazard class	ORM-D
Subsidiary hazard class	None
Additional information:	
Packaging exceptions	156, 306
Packaging non bulk	156, 306
Packaging bulk	None

IMDG

Basic shipping requirements:	
Proper shipping name	AEROSOLS
Hazard class	2.1
UN number	1950
Additional information:	
Packaging exceptions	LTD QTY
Item	5F
Labels required	None
Transport Category	2

IATA

Basic shipping requirements:	
Proper shipping name	Aerosols, flammable
Hazard class	2.1
UN number	1950
Additional information:	
Packaging exceptions	LTD QTY
Labels required	2.1

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	Yes

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No
Section 302 extremely hazardous substance	No
Section 311 hazardous chemical	Yes

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)	Yes
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
n-Butane	106-97-8	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
Personal protection:

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.

MSDS sections updated

Product and Company Identification: Alternate Trade Names
Transport Information: Agency Name and Packaging Type/Transport Mode Selection

Prepared by

Regulatory Compliance