



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 015-003
Product name Disinfectant Spray for Health Care Use
Effective date 20-Mar-2013
Company information Sprayway, Inc.
1005 Westgate Drive
Addison, IL 60101 United States
Company phone General Assistance 630-628-3000
Emergency telephone US 1-866-836-8855
Emergency telephone outside US 1-952-852-4646
Version # 02
Supersedes date 02-Sep-2011
Expiry Date 20-Mar-2016
Product use Disinfectant

2. Hazards Identification

Emergency overview Flammable aerosol. Yields a flame projection at full valve opening or a flashback at any degree of valve opening. Heat may cause the containers to explode. Contact with eyes may cause irritation. CONTENTS UNDER PRESSURE. Prolonged exposure may cause chronic effects.

Potential health effects

Routes of exposure Eye contact. Skin contact. Ingestion.

Eyes Moderately irritating to the eyes.

Skin Harmful if absorbed through the skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

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 Central nervous system. Eyes. Lungs. Skin.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Ethyl Alcohol	64-17-5	30 - 60
n-Butane	106-97-8	10 - 30
Propane	74-98-6	5 - 10
Non-hazardous and other components below reportable levels		10 - 30

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. Call a physician or Poison Control Center immediately.

Skin contact Take off immediately all contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

Inhalation Move to fresh air. Get medical attention if symptoms persist.

Ingestion In the unlikely event of swallowing contact a physician or poison control center.

5. Fire Fighting Measures

Flammable properties	Flammable by WHMIS criteria. Heat may cause the containers to explode. Ruptured cylinders may rocket. Vapors may travel considerable distance to a source of ignition and flash back.
Extinguishing media	
Suitable extinguishing media	Foam. Dry chemical. Carbon dioxide (CO2).
Protection of firefighters	
Protective equipment and precautions for firefighters	Containers should be cooled with water to prevent vapor pressure build up. Some of these materials, if spilled, may evaporate leaving a flammable residue. Do not direct water at source of leak or safety devices as icing may occur. 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.
Unusual fire & explosion hazards	Flammable by WHMIS criteria. Heat may cause the containers to explode. Ruptured cylinders may rocket. Vapors may travel considerable distance to a source of ignition and flash back.

6. Accidental Release Measures

Methods for containment	Stop leak if you can do so without risk. If possible, turn leaking containers so that gas escapes rather than liquid. Move the cylinder to a safe and open area if the leak is irreparable. Stop the flow of material, if this is without risk. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Prevent entry into waterways, sewer, basements or confined areas.
Methods for cleaning up	Clean up in accordance with all applicable regulations. Ventilate the area. 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 surface thoroughly to remove residual contamination.

7. Handling and Storage

Handling	Pressurized container: Do not pierce or burn, even after use. When using do not smoke. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not use if spray button is missing or defective. Do not re-use empty containers. Wear personal protective equipment. Avoid prolonged exposure.
Storage	Contents under pressure. Do not puncture, incinerate or crush. Keep away from heat and sources of ignition. Avoid exposure to long periods of sunlight. Keep at temperature not exceeding 49 °C. Store in a well-ventilated place. Keep out of the reach of children. Level 2 Aerosol.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH

Components	CAS #	TWA	STEL	Ceiling
Ethyl Alcohol	64-17-5	1000 ppm	1000 ppm	Not established
n-Butane	106-97-8	1000 ppm	Not established	Not established
Propane	74-98-6	1000 ppm	Not established	Not established

Personal protective equipment

Eye / face protection	Do not get in eyes. Chemical goggles are recommended.
Skin protection	Chemical resistant gloves.
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

9. Physical & Chemical Properties

Appearance	Compressed liquefied gas.
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Boiling point	143.6 °F (62.2 °C) estimated
Color	colorless
Evaporation rate	Not available
Flammability (HOC)	23.3798 kJ/g estimated
Flammability limits in air, lower, % by volume	Not available
Flammability limits in air, upper, % by volume	Not available
Flash back	Yes
Flash point	-156 °F (-104.4 °C) Propellant
Form	Compressed gas. Aerosol.
Freezing point	Not available
Odor	fruity alcoholic
Odor threshold	Not available
pH	9.5 - 10.5
Physical state	Liquid.
Pressure	75 - 90 psig @ 70F
Solubility (H2O)	Miscible.
Specific gravity	0.7517

10. Chemical Stability & Reactivity Information

Chemical stability	Risk of ignition.
Conditions to avoid	Aerosol containers are unstable at temperatures above 49°C. Heat, flames and sparks.
Incompatible materials	Isocyanates. Strong oxidizing agents.
Hazardous decomposition products	May include oxides of nitrogen.

11. Toxicological Information

Acute effects Acute LC50: 83 mg/l/4h estimated, Rat, Inhalation

Component analysis - LD50

Toxicology Data - Selected LD50s and LC50s

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
Propane	74-98-6	Inhalation LC50 Rat 658 mg/L 4 h

Sensitization Not expected to be hazardous by WHMIS criteria.

Carcinogenicity

ACGIH - Threshold Limit Values - Carcinogens

Ethyl Alcohol	64-17-5	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
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IARC - Group 1 (Carcinogenic to Humans)

Ethyl Alcohol	64-17-5	Monograph 100E [2012] (in alcoholic beverages); Monograph 96 [2010] (in alcoholic beverages)
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Mutagenicity Not expected to be hazardous by WHMIS criteria.

Teratogenicity Animal experiments showed mutagenic and teratogenic effects.

12. Ecological Information

Ecotoxicity LC50 1750 mg/L, Fish, 96.00 Hours,
EC50 929 mg/L, Daphnia, 48.00 Hours,
Contains a substance which causes risk of hazardous effects to the environment.

Environmental effects An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13. Disposal Considerations

Disposal instructions Contents under pressure. Dispose of this material and its container to hazardous or special waste collection point. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose in accordance with all applicable regulations.

14. Transport Information

Canadian Transportation of Dangerous Goods (TDG) Requirements

Proper shipping name	AEROSOLS, flammable
Hazard class	2.1
UN number	UN1950
Marine pollutant	•
Special provisions	80 SOR/2002-306
Packaging exceptions	If <1L: Consumer Commodity



15. Regulatory Information

Canadian regulations This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Canada - WHMIS - Ingredient Disclosure List

Ethyl Alcohol	64-17-5	0.1 %
n-Butane	106-97-8	1 %

WHMIS status	Controlled
WHMIS classification	A - Compressed Gas B1 - Flammable/Combustible D2A - Other Toxic Effects-VERY TOXIC D2B - Other Toxic Effects-TOXIC

WHMIS labeling



Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	No
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)

16. Other Information

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: Product Review
Composition / Information on Ingredients: Ingredients
Hazards Identification: Target organs
Hazards Identification: Main symptoms

Prepared by Regulatory Compliance