



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product number** SW015DIN  
**Material name** **DISINFECTANT SPRAY FOR HEALTH CARE USE**  
**Revision date** 06-16-2014  
**Company information** SPRAYWAY INC.  
1005 SOUTH WESTGATE DR  
ADDISON, IL 60101 United States  
**Company phone**  
**Emergency telephone US** 1-866-836-8855  
**Emergency telephone outside US** 1-952-852-4646  
**Version #** 02  
**Supersedes date** 06-13-2014  
**Expiry Date** 12-Jun-2017  
**Product use** Disinfectant

## 2. Hazards Identification

**Emergency overview** Flammable aerosol. CONTENTS UNDER PRESSURE.  
Pressurized container may explode when exposed to heat or flame. Yields a flame projection at full valve opening or a flashback at any degree of valve opening.  
  
Will be easily ignited by heat, spark or flames.

**Potential health effects**  
**Routes of exposure** Inhalation. Ingestion. Skin contact. Eye contact.  
**Eyes** Contact with eyes may cause irritation.  
**Skin** Health injuries are not known or expected under normal use.  
**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.

**Target organs** Blood. Central nervous system. Liver. Lungs. Respiratory system.

**Potential environmental effects** May cause long-term adverse effects in the environment.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent
Ethanol	64-17-5	30 - 60
Butane	106-97-8	10 - 30
Propane	74-98-6	5 - 10
Other components below reportable levels		15 - 40

## 4. First Aid Measures

**First aid procedures**  
**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.  
**Skin contact** Remove and isolate contaminated clothing and shoes. Immediately flush skin with plenty of water. Get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.  
**Inhalation** Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately.

<b>Ingestion</b>	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
<b>Notes to physician</b>	Symptoms may be delayed.
<b>General advice</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire Fighting Measures

<b>Flammable properties</b>	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.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Powder. Alcohol resistant foam. Water. Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	Do not use a solid water stream as it may scatter and spread fire.
<b>Protection of firefighters</b>	
<b>Specific hazards arising from the chemical</b>	Contents under pressure. Pressurized container may explode when exposed to heat or flame.
<b>Protective equipment for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus. Structural firefighters protective clothing will only provide limited protection. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Do not direct water at source of leak or safety devices as icing may occur. Use water spray to cool unopened containers. 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. Some of these materials, if spilled, may evaporate leaving a flammable residue.
<b>Specific methods</b>	Cool containers exposed to flames with water until well after the fire is out.
<b>Explosion data</b>	
<b>Sensitivity to static discharge</b>	Not available.
<b>Sensitivity to mechanical impact</b>	Not available.

## 6. Accidental Release Measures

<b>Personal precautions</b>	Consider initial downwind evacuation for at least 500 meters (1/3 mile). Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Pay attention to flashback. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. For personal protection, see section 8 of the MSDS.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
<b>Methods for containment</b>	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). 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. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Keep out of low areas.
<b>Methods for cleaning up</b>	Ventilate the area. Should not be released into the environment. Stop the flow of material, if this is without risk. Isolate area until gas has dispersed. Following product recovery, flush area with water. Clean up in accordance with all applicable regulations. For waste disposal, see section 13 of the MSDS.
<b>Other information</b>	Clean up in accordance with all applicable regulations.

## 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. 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. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not get this material on clothing. Do not use in areas without adequate ventilation. Wash thoroughly after handling.

### Storage

Contents under pressure. The pressure in sealed containers can increase under the influence of heat. 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. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Keep container dry. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the MSDS). Level 2 Aerosol.

## 8. Exposure Controls / Personal Protection

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

Components	Type	Value
Ethyl Alcohol (CAS 64-17-5)	STEL	1000 ppm

#### Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Butane (CAS 106-97-8)	TWA	1000 ppm
Ethyl Alcohol (CAS 64-17-5)	TWA	1880 mg/m3 1000 ppm
Propane (CAS 74-98-6)	TWA	1000 ppm

#### Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
Butane (CAS 106-97-8)	STEL	750 ppm
	TWA	600 ppm
Ethyl Alcohol (CAS 64-17-5)	STEL	1000 ppm

#### Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
Butane (CAS 106-97-8)	TWA	800 ppm
Ethyl Alcohol (CAS 64-17-5)	STEL	1000 ppm

#### Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
Butane (CAS 106-97-8)	TWA	1900 mg/m3 800 ppm
Ethyl Alcohol (CAS 64-17-5)	TWA	1880 mg/m3 1000 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m3 1000 ppm

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

Components	Type	Value
Ethyl Alcohol (CAS 64-17-5)	PEL	1900 mg/m3 1000 ppm
Propane (CAS 74-98-6)	PEL	1800 mg/m3 1000 ppm

### Engineering controls

Ensure adequate ventilation, especially in confined areas.

### Personal protective equipment

#### Eye / face protection

Face-shield.

#### Skin protection

Wear chemical protective equipment that is specifically recommended by the manufacturer.

**Respiratory protection**

If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

**9. Physical & Chemical Properties**

<b>Appearance</b>	Not available.
<b>Boiling point</b>	140.71 °F (60.39 °C) estimated
<b>Color</b>	Not available.
<b>Flash point</b>	-156.00 °F (-104.44 °C) Propellant estimated
<b>Form</b>	Aerosol.
<b>Melting point/Freezing point</b>	Not available.
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Physical state</b>	Gas.
<b>Vapor pressure</b>	75 - 85 psig @70F estimated
<b>Solubility (water)</b>	Not available.
<b>Specific gravity</b>	0.79 estimated
<b>Flammability limits in air, upper, % by volume</b>	11.4 % estimated
<b>Flammability limits in air, lower, % by volume</b>	2.4 % estimated

**10. Chemical Stability & Reactivity Information**

<b>Chemical stability</b>	Risk of ignition.
<b>Conditions to avoid</b>	Heat, flames and sparks. Aerosol containers are unstable at temperatures above 49°C. Avoid temperatures exceeding the flash point.
<b>Hazardous decomposition products</b>	Not available.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.

**11. Toxicological Information****Toxicological data**

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Butane (CAS 106-97-8)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Mouse	680 mg/l, 2 Hours
	Rat	658 mg/l, 4 Hours
Ethanol (CAS 64-17-5)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Mouse	39 mg/l, 4 Hours
	Rat	20000 mg/l, 10 Hours
<i>Oral</i>		
LD50	Dog	5.5 g/kg
	Guinea pig	5.6 g/kg
	Mouse	3450 mg/kg
	Rat	6.2 g/kg
<i>Other</i>		
LD50	Mouse	933 mg/kg

Components	Species	Test Results
Propane (CAS 74-98-6)	Rat	1440 mg/kg
<b>Acute</b> <i>Inhalation</i> LC50	Rat	> 1442.847 mg/l, 15 Minutes 658 mg/l/4h

\* Estimates for product may be based on additional component data not shown.

### Carcinogenicity

#### ACGIH Carcinogens

Ethanol (CAS 64-17-5)

A3 Confirmed animal carcinogen with unknown relevance to humans.

## 12. Ecological Information

### Ecotoxicological data

Product	Species	Test Results
Disinfectant Spray for Hospital Use (CAS Mixture)		
Algae	IC50	472.2222 mg/L, 72 Hours, estimated
Crustacea	EC50	890.5942 mg/L, 48 Hours, estimated
Fish	LC50	1684.6193 mg/L, 96 Hours, estimated

Components	Species	Test Results
Ethanol (CAS 64-17-5)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) 7700 - 11200 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) > 100.1 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

<b>Ecotoxicity</b>	Contains a substance which causes risk of hazardous effects to the environment.
<b>Environmental effects</b>	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
<b>Persistence and degradability</b>	Not available.
<b>Partition coefficient</b>	
Butane	2.89
Ethanol	-0.31
Propane	2.36

## 13. Disposal Considerations

<b>Disposal instructions</b>	Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.
<b>Waste from residues / unused products</b>	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).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport Information

### TDG

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	AEROSOLS, flammable
<b>Hazard class</b>	2.1
<b>Special provisions</b>	80
<b>Packaging exceptions</b>	If <1L: Limited Quantity

### IATA

<b>UN number</b>	UN1950
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Product name: Disinfectant Spray for Hospital Use

Product #: 0881, 1000006974, 1000006973, 1000007011, 1000006976, 1000007214, 1000007838 Version #: 02 Revision date: 06-16

MSDS CANADA

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**UN proper shipping name** Aerosols, flammable  
**Transport hazard class(es)** 2.1  
**Labels required** 2.1  
**ERG code** 10L  
**Special precautions for user** Read safety instructions, MSDS and emergency procedures before handling.  
**Packaging Exceptions** LTD QTY

**IMDG**

**UN number** UN1950  
**UN proper shipping name** AEROSOLS  
**Transport hazard class(es)** 2.1  
**Labels required** None  
**EmS** F-D, S-U  
**Special precautions for user** Read safety instructions, MSDS and emergency procedures before handling.  
**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.  
**Packaging Exceptions** LTD QTY

**IATA; IMDG; TDG**



**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.

**WHMIS status** Controlled

**WHMIS classification**  
 A - Compressed Gas  
 B5 - Flammable Aerosols  
 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)	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)	Yes
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies 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

### Disclaimer

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.

### This data sheet contains changes from the previous version in section(s):

Product and Company Identification: Alternate Trade Names