



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product number** 008-002  
**Product name** Disinfectant Spray for Hospital Use  
**Effective date** 01-Sep-2011  
**Company information** Claire Manufacturing Co.  
1005 S. Westgate Drive  
Addison, IL 60101 United States  
**Company phone** General Assistance 630-543-7600  
**Emergency telephone US** 800-424-9300  
**Emergency telephone outside US** 703-527-3887  
**Version #** 08  
**Supersedes date** 04-Aug-2009

## 2. Hazards Identification

**Emergency overview** Aerosol. FLAMMABLE  
CONTENTS UNDER PRESSURE.  
Will be easily ignited by heat, spark or flames. Contact with eyes may cause irritation.  
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. May cause delayed lung damage.  
Components of the product may be absorbed into the body by ingestion.

**Target organs** Central nervous system. Lungs.

**Chronic effects** Unconsciousness. Cyanosis (blue tissue condition, nails, lips, and/or skin). May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage. May cause delayed lung injury.

**Signs and symptoms** Discomfort in the chest. Narcosis. Cyanosis (blue tissue condition, nails, lips, and/or skin). Coughing. Jaundice. Defatting of the skin. Skin irritation.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent
Ethyl Alcohol	64-17-5	40 - 50
n-Butane	106-97-8	15 - 20
Propane	74-98-6	5 - 8
Methanol	67-56-1	1 - 3
Non-hazardous and other components below reportable levels		20 - 40

## 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**  
**Notes to physician**

In the unlikely event of swallowing contact a physician or poison control center.  
Keep victim under observation. Symptoms may be delayed.

## 5. Fire Fighting Measures

**Flammable properties** 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** Foam. Dry chemical. Carbon dioxide (CO<sub>2</sub>). Do not use water jet.

**Protection of firefighters**

**Specific hazards arising from the chemical** Fire may produce irritating, corrosive and/or toxic gases.

**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.

## 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 surface thoroughly to remove residual contamination.

## 7. Handling and Storage

**Handling** Pressurized container: Do not pierce or burn, even after use. 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 sources of ignition. Avoid exposure to long periods of sunlight. Store in cool place. Keep in an area equipped with sprinklers. 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
Methanol	67-56-1	200 ppm	250 ppm	Not established

#### OSHA

Components	CAS #	TWA	STEL	Ceiling
Ethyl Alcohol	64-17-5	1000 ppm	Not established	Not established
Propane	74-98-6	1000 ppm	Not established	Not established
Methanol	67-56-1	200 ppm	Not established	Not established

### Personal protective equipment

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

## 9. Physical & Chemical Properties

<b>Appearance</b>	Compressed liquefied gas.
<b>Boiling point</b>	136.4 °F (57.8 °C) estimated
<b>Color</b>	clear colorless
<b>Density</b>	0.7518 g/cm <sup>3</sup> estimated
<b>Flammability (HOC)</b>	24.953 kJ/g estimated
<b>Flash back</b>	No
<b>Flash point</b>	-156 °F (-104.4 °C) Propellant
<b>Form</b>	Aerosol.
<b>Freezing point</b>	Not available
<b>Odor</b>	Alcoholic.
<b>pH</b>	9.5 - 10.5
<b>Physical state</b>	Liquid.
<b>Pressure</b>	70 - 80 psig @70F
<b>Solubility</b>	Partially
<b>Specific gravity</b>	0.7519

## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Risk of ignition.
<b>Conditions to avoid</b>	Heat, flames and sparks.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological Information

### 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
Methanol	67-56-1	Inhalation LC50 Rat 83.2 mg/L 4 h; Inhalation LC50 Rat 64000 ppm 4 h; Oral LD50 Rat 5628 mg/kg; Dermal LD50 Rabbit 15800 mg/kg
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 OSHA criteria.

### Carcinogenicity

#### IARC - Group 1 (Carcinogenic to Humans)

Ethyl Alcohol	64-17-5	Monograph 100E [in preparation] (in alcoholic beverages); Monograph 96 [in preparation] (in alcoholic beverages)
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**Teratogenicity** Animal experiments showed mutagenic and teratogenic effects.

## 12. Ecological Information

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

LC50 1762 mg/L, Fish, 96.00 Hours,  
EC50 952 mg/L, Daphnia, 48.00 Hours,  
IC50 569 mg/L, Algae, 72.00 Hours,

## 13. Disposal Considerations

<b>Waste codes</b>	D001: Waste Flammable material with a flash point <140 F
<b>Disposal instructions</b>	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.

## 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

Methanol 67-56-1 1.0 % de minimis concentration

### Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

### CERCLA (Superfund) reportable quantity

Methanol: 5000.0000

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 302 extremely hazardous substance	No
Section 311 hazardous chemical	Yes
Hazard categories (311/312)	Immediate Hazard - Yes Delayed Hazard - Yes 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)	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
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**

**WARNING:** This product contains a chemical known to the State of California to cause cancer.

**U.S. - Pennsylvania - RTK (Right to Know) List**

Ethyl Alcohol	64-17-5	Present
Methanol	67-56-1	Environmental hazard
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: 3  
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.

**MSDS sections updated**

This document has undergone significant changes and should be reviewed in its entirety.

**Prepared by**

Regulatory Compliance