



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product number** 009  
**Product name** Disinfectant Spray For Hospital Use  
**Effective date** 18-Mar-2008  
**Company information** Claire Manufacturing  
500 Vista Ave.  
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 #** 06  
**Supersedes date** 08-Feb-2008

## 2. Hazards Identification

**Emergency overview** FLAMMABLE

Irritating to eyes. Prolonged exposure may cause chronic effects. CONTENTS UNDER PRESSURE.

Aerosol. Pressurized container may explode when exposed to heat or flame.

**OSHA regulatory status** This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

### Potential health effects

**Eyes** Causes eye irritation.

**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. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause delayed lung damage.

**Target organs** Blood. Central nervous system. Gastrointestinal tract. Liver. Respiratory system.

**Chronic effects** Unconsciousness. 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. May cause delayed lung damage.

**Signs and symptoms** Discomfort in the chest. Narcosis. Cyanosis. Liver enlargement. Jaundice. Defatting of the 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	3 - 5
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. 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** Move to fresh air. Call a physician if symptoms develop or persist.

**Ingestion**

Rinse mouth. Get medical attention immediately. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. 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.

**Notes to physician**

Symptoms may be delayed.

**General advice**

Call a physician if symptoms develop or persist.

## 5. Fire Fighting Measures

**Flammable properties**

Containers may explode when heated. 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>).

**Unsuitable extinguishing media**

Do not use a solid water stream as it may scatter and spread fire.

**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 the event of fire and/or explosion do not breathe fumes. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Containers should be cooled with water to prevent vapor pressure build up. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

**Specific hazards**

Fire may produce irritating, corrosive and/or toxic gases.

## 6. Accidental Release Measures

**Personal precautions**

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Keep unnecessary personnel away.

**Methods for containment**

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Prevent entry into waterways, sewers, basements or confined areas.

**Methods for cleaning up**

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

## 7. Handling and Storage

**Handling**

Pressurized container: Do not pierce or burn, even after use. Do not handle or store near an open flame, heat or other sources of ignition. Use only in area provided with appropriate exhaust ventilation. Do not use if spray button is missing or defective. Do not get this material in contact with eyes. Do not get this material in contact with skin. Wear personal protective equipment. Avoid prolonged exposure.

**Storage**

Level 2 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, sparks, and flame. Avoid exposure to long periods of sunlight. Store in cool place. Keep container tightly closed. Keep in an area equipped with sprinklers. Keep out of the reach of children. Use care in handling/storage.

## 8. Exposure Controls / Personal Protection

**Exposure limits****ACGIH****Components****CAS #****TWA****STEL****Ceiling**

Ethyl Alcohol

64-17-5

1000 ppm

Not established

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

**Engineering controls** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

**Personal protective equipment**

**Eye / face protection** Wear chemical goggles.  
**Skin protection** Protective gloves.  
**Respiratory protection** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.  
**General hygiene considerations** When using do not smoke. Avoid contact with eyes. Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practice.

**9. Physical & Chemical Properties**

**Appearance** Compressed liquefied gas.  
**Color** clear colorless  
**Odor** Alcoholic.  
**Physical state** Gas.  
**Form** Aerosol.  
**Flammability (HOC)** 24.96 kJ/g  
**Flash back** No  
**Pressure** 47 - 57 psig @70F  
**Solubility** Partially  
**Flash point** -156 °F (-104.4 °C)  
**Boiling point** 136.4 °F (57.8 °C) estimated  
**Specific gravity** 0.7517  
**pH** 9.56 - 10.56

**10. Chemical Stability & Reactivity Information**

**Chemical stability** Risk of ignition. Stable at normal conditions.  
**Conditions to avoid** Heat, flames and sparks.  
**Incompatible materials** Isocyanates.  
**Hazardous decomposition products** May include oxides of nitrogen.

**11. Toxicological Information**

**Acute effects** Acute LC50: 84 mg/l/4h estimated, Rat, Inhalation  
**Sensitization** Not expected to be hazardous by OSHA criteria.  
**Local effects** Liver toxicity. Blood disorder may occur after ingestion. Irritating to eyes. Components of the product may be absorbed into the body through the skin.  
**Chronic effects** Hazardous by OSHA criteria. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged or repeated exposure may cause lung injury. Prolonged exposure may cause chronic effects.  
**Subchronic effects** Blood disorder may occur after prolonged inhalation. Blood disorder may occur after prolonged skin contact.  
**Neurological effects** Hazardous by OSHA criteria.  
**Mutagenicity** Not expected to be hazardous by OSHA criteria.  
**Reproductive effects** Not expected to be hazardous by OSHA criteria. Possible reproductive hazard.  
**Teratogenicity** Not expected to be hazardous by OSHA criteria.  
**Epidemiology** Hazardous by OSHA criteria.  
**Further information** Symptoms may be delayed.

## 12. Ecological Information

**Ecotoxicity** LC50 1749 mg/L estimated, Fish, 96.00 Hours,  
EC50 17760 mg/L estimated, Daphnia, 48.00 Hours,  
Components of this product have been identified as having potential environmental concerns.

## 13. Disposal Considerations

**Waste codes** D001: Waste Flammable material with a flash point <140 F  
**Disposal instructions** Consult authorities before disposal. Contents under pressure. Incinerate the material under controlled conditions in an approved incinerator. 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

### 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, flammable  
**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** None



## 15. Regulatory Information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
All components are on the U.S. EPA TSCA Inventory List.

#### 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)**

**Hazard categories**  
 Immediate Hazard - Yes  
 Delayed Hazard - Yes  
 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)	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****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****HMIS® ratings**

Health: 1\*  
 Flammability: 4  
 Physical hazard: 0

**Prepared by**

Regulatory Compliance

**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.

**Issue date**

18-Mar-2008