



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 010-002
Product name Disinfectant Spray For Hospital Use
Effective date 04-Mar-2010
Company information Claire Mfg.
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 # 07
Supersedes date 04-Aug-2009

2. Hazards Identification

Emergency overview Flammable. Aerosol. CONTENTS UNDER PRESSURE. Will be easily ignited by heat, spark or flames. Harmful in contact with eyes. Prolonged exposure may cause chronic effects.

Potential health effects

Eyes Moderately irritating to the eyes.

Skin Harmful if 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). 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. 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. Conjunctiva. 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. Prolonged skin contact may defat the skin and produce dermatitis. Can cause adverse reproductive effects.

Signs and symptoms Discomfort in the chest. Corneal damage. Narcosis. Cyanosis. Liver enlargement. Jaundice. Conjunctivitis. Defatting of the skin. Irritation. Birth defects. Sterility.

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. Get medical attention immediately.

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.

5. Fire Fighting Measures

Flammable properties Vapor or gas may spread to distant ignition sources and flash back.

Extinguishing media

Suitable extinguishing media Foam. Dry chemical. Carbon dioxide (CO2).

Protection of firefighters

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. 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.

6. Accidental Release Measures

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.

Methods for cleaning up 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 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. 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 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 Wear chemical goggles.

Skin protection Protective 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.
Boiling point	136.4 °F (57.8 °C) estimated
Color	colorless
Flammability (HOC)	25 kJ/g
Flash back	No
Flash point	-156 °F (-104.4 °C) estimated
Form	Aerosol.
Odor	fruity alcoholic
pH	9.04 - 10.04
Physical state	Liquid.
Pressure	52 - 62 psig @ 70F
Solubility	Partially
Specific gravity	0.7515

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	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: 81 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
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 96 [in preparation] (in alcoholic beverages)
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Reproductive effects Hazardous by OSHA criteria. Possible reproductive hazard.

Teratogenicity Not expected to be hazardous by OSHA criteria.

12. Ecological Information

Ecotoxicity LC50 1824 mg/L estimated, Fish, 96.00 Hours,
EC50 932 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. 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

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)

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)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	Yes
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: 3
Physical hazard: 0
Personal protection: X

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.

MSDS sections updated

Product and Company Identification: Product Review
Hazards Identification: Emergency overview
Hazards Identification: Eyes
Hazards Identification: Skin
Chemical Stability & Reactivity Information: Stability
Toxicological Information: Teratogenicity
Transport Information: Product Shipping Name/Packing Group
Regulatory Information: Canada

Prepared by

Regulatory Compliance