1. Product and Company Identification

Product number: 014-003
Product name: Disinfectant Spray for Health Care Use
Effective date: 02-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 #: 01

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:
Blood. 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. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. May cause delayed lung injury.

Signs and symptoms:

3. Composition / Information on Ingredients

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

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

Notes to physician
Keep victim under observation.

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 (CO2).

Protection of 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
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. Do not get this material in contact with eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin.

Storage
Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Do not handle or store near an open flame, heat or other sources of ignition. Avoid exposure to long periods of sunlight. Store in cool place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs. Level 2 Aerosol.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>TWA</th>
<th>STEL</th>
<th>Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td>64-17-5</td>
<td>1000 ppm</td>
<td>1000 ppm</td>
<td>Not established</td>
</tr>
<tr>
<td>n-Butane</td>
<td>106-97-8</td>
<td>1000 ppm</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>1000 ppm</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>200 ppm</td>
<td>250 ppm</td>
<td>Not established</td>
</tr>
</tbody>
</table>

OSHA

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>TWA</th>
<th>STEL</th>
<th>Ceiling</th>
</tr>
</thead>
<tbody>
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<td>Ethyl Alcohol</td>
<td>64-17-5</td>
<td>1000 ppm</td>
<td>Not established</td>
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</tr>
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<td>Propane</td>
<td>74-98-6</td>
<td>1000 ppm</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>200 ppm</td>
<td>Not established</td>
<td>Not established</td>
</tr>
</tbody>
</table>

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.

Boiling point
136.4 °F (57.8 °C) estimated
Color: colorless
Density: 0.7516 g/cm³ estimated
Flammability (HOC): 25.0491 kJ/g estimated
Flash back: Yes
Flash point: -156 °F (-104.4 °C) Propellant
Form: Aerosol.
Freezing point: Not available
Odor: fruity alcoholic
pH: 9.5 - 10.5
Physical state: Liquid.
Pressure: 75 - 90 psig @ 70°F
Solubility: Partially
Specific gravity: 0.7517

10. Chemical Stability & Reactivity Information

Chemical stability: Stable at normal conditions.
Conditions to avoid: Heat, flames and sparks.
Incompatible materials: 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

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td>64-17-5</td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
</tr>
<tr>
<td>n-Butane</td>
<td>106-97-8</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
</tr>
</tbody>
</table>

Toxicology Data - Selected LD50s and LC50s

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td>Oral LD50 Rat 7060 mg/kg; Inhalation LC50 Rat 124.7 mg/L 4 h</td>
</tr>
<tr>
<td>Methanol</td>
<td>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</td>
</tr>
<tr>
<td>n-Butane</td>
<td>Inhalation LC50 Rat 658 mg/L 4 h</td>
</tr>
<tr>
<td>Propane</td>
<td>Inhalation LC50 Rat 658 mg/L 4 h</td>
</tr>
</tbody>
</table>

Sensitization: Not expected to be hazardous by OSHA criteria.
Carcinogenicity: IARC - Group 1 (Carcinogenic to Humans)

<table>
<thead>
<tr>
<th>Component</th>
<th>Carcinogenicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td>Monograph 100E [in preparation] (in alcoholic beverages); Monograph 96 [in preparation] (in alcoholic beverages)</td>
</tr>
</tbody>
</table>

Teratogenicity: Animal experiments showed mutagenic and teratogenic effects.

12. Ecological Information

Ecotoxicity: LC50 1730 mg/L, Fish, 96.00 Hours,
EC50 931 mg/L, Daphnia, 48.00 Hours,
Contains a substance which causes risk of hazardous effects to the environment.

13. Disposal Considerations

Waste codes: D001: Waste Flammable material with a flash point <140 F
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

#### 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

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### 15. Regulatory Information

**US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. Pesticides are exempt from TSCA.

- **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
  - **Immediate Hazard:** Yes
  - **Delayed Hazard:** Yes
  - **Fire Hazard:** Yes
  - **Pressure Hazard:** Yes
  - **Reactivity Hazard:** No
## Inventory status

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of New and Existing Chemicals (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>U.S. - Pennsylvania - RTK (Right to Know) List</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td>64-17-5 Present</td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1 Environmental hazard</td>
</tr>
<tr>
<td>n-Butane</td>
<td>106-97-8 Present</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6 Present</td>
</tr>
</tbody>
</table>

## 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
- Personal protection:

**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.

**Prepared by**

Regulatory Compliance