Section 1: Product & Company Identification

Product Name: CRC® HydroForce® Germicidal Foam Cleaner
Product Number (s): 14430
Product Use: germicidal cleaner

Manufacturer / Supplier Contact Information:
In United States: CRC Industries, Inc.
885 Louis Drive
Warminster, PA 18974
www.crcindustries.com
1-215-674-4300 (General)
(800) 521-3168 (Technical)
(800) 272-4620 (Customer Service)

In Canada: CRC Canada Co.
2-1246 Lorimar Drive
Mississauga, Ontario L5S 1R2
www.crc-canada.ca
1-905-670-2291

In Mexico: CRC Industries Mexico
Av. Benito Juárez 4055 G
Colonia Orquidea
San Luis Potosi, SLP CP 78394
www.crc-mexico.com
52-444-824-1666

24-Hr Emergency – CHEMTREC: (800) 424-9300 or (703) 527-3887

Section 2: Hazards Identification

Emergency Overview

CAUTION: Harmful if Inhaled. Contents Under Pressure.
As defined by OSHA’s Hazard Communication Standard, this product is hazardous.

Appearance & Odor: Foaming spray, floral / ammonia odor

Potential Health Effects:

ACUTE EFFECTS:
EYE: May cause moderate irritation.
SKIN: Prolonged or repeated contact can cause irritation and defatting of the skin. This product may be harmful if absorbed through the skin.
INHALATION: May cause dizziness, drowsiness and throat irritation.
INGESTION: May cause irritation to gastrointestinal tract.

CHRONIC EFFECTS: None known

TARGET ORGANS: None known

Medical Conditions Aggravated by Exposure: pre-existing skin or eye disorders

See Section 11 for toxicology and carcinogenicity information on product ingredients.
Section 3: Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS NUMBER</th>
<th>% by Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>85 – 95</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>4.85</td>
</tr>
<tr>
<td>Quarternary Ammonium Chloride</td>
<td>5197-80-8</td>
<td>&lt; 0.5</td>
</tr>
<tr>
<td>Alkyl Dimethyl Amine Oxide</td>
<td>7128-91-8</td>
<td>1 – 5</td>
</tr>
<tr>
<td>Sodium Ethylene Diamine Tetraacetate</td>
<td>64-02-8</td>
<td>1 – 5</td>
</tr>
<tr>
<td>Liquefied Petroleum Gas</td>
<td>68476-85-7</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

Ingestion: Do not induce vomiting. Call a physician.

Note to Physicians: This product contains 2-Butoxyethanol which, if ingested in significant quantities, may result in red blood cell hemolysis.

Section 5: Fire-Fighting Measures

Flammable Properties: This product is non-flammable in accordance with aerosol flammability definitions. (See 16 CFR 1500.3(c)(6)).

- Flash Point: None
- Autoignition Temperature: None
  - Upper Explosive Limit: 9.2
  - Lower Explosive Limit: 1.8

Fire and Explosion Data:

Suitable Extinguishing Media: Use extinguishing agents appropriate for surrounding fire.

Products of Combustion: None

Explosion Hazards: Aerosol containers, when exposed to heat from fire, may build pressure and explode.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains.
Methods for Containment & Clean-up: Dike area to contain spill. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Avoid breathing vapor. Use with adequate ventilation. Avoid contact with skin and eyes. Wash hands after use. Do not expose aerosol containers to heat or flame. Do not incinerate container. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. For product use instructions, please see the product label.

Storage Procedures: Store in a cool dry area out of direct sunlight. Aerosol cans must be maintained below 120°F to prevent cans from rupturing.

Aerosol Storage Level: I

Section 8: Exposure Controls/ Personal Protection

Exposure Guidelines:

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>STEL</td>
<td>TWA</td>
</tr>
<tr>
<td>Water</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>50 (s)</td>
<td>NE</td>
<td>20</td>
</tr>
<tr>
<td>Quarternary Ammonium Chloride</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Alkyl Dimethyl Amine Oxide</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Sodium Ethylene Diamine Tetraacetate</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Liquefied Petroleum Gas</td>
<td>1000</td>
<td>NE</td>
<td>1000</td>
</tr>
</tbody>
</table>

N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated

Controls and Protection:

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.

Respiratory Protection: None required for normal work where adequate ventilation is provided. If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with organic vapor cartridge. Air monitoring is needed to determine actual employee exposure levels. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as nitrile. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.
Section 9: Physical and Chemical Properties

Physical State: liquid
Color: white foamy
Odor: floral / ammonia
Odor Threshold: ND
Specific Gravity: 1.00 – 1.01
Initial Boiling Point: ND
Freezing Point: ND
Vapor Pressure: 115 psig @ 130°F
Vapor Density: > 1 (air = 1)
Evaporation Rate: slow
Solubility: soluble in water
Coefficient of water/oil distribution: Nd
pH: 12.38
Volatile Organic Compounds: wt %: 7.9  g/L: 77.0  lbs./gal: 0.6

Section 10: Stability and Reactivity

Stability: Stable
Conditions to Avoid: Keep away from heat, direct sunlight, open flames or sparks. Dropping of containers may cause bursting.
Incompatible Materials: Strong oxidizers
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide
Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

Acute Toxicity:

<table>
<thead>
<tr>
<th>Component</th>
<th>Oral LD50 (rat)</th>
<th>Dermal LD50 (rabbit)</th>
<th>Inhalation LC50 (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>&gt; 90 mL/kg</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>470 mg/kg</td>
<td>220 mg/kg</td>
<td>450 ppm/4H</td>
</tr>
<tr>
<td>Quarternary Ammonium Chloride</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Alkyl Dimethyl Amine Oxide</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Sodium Ethylene Diamine Tetraacetate</td>
<td>10 g/kg</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Liquefied Petroleum Gas</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
</tbody>
</table>
**Product Name:** CRC® HydroForce® Germicidal Foam Cleaner

**Product Number (s):** 14430

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## Chronic Toxicity:

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA Carcinogen</th>
<th>IARC Carcinogen</th>
<th>NTP Carcinogen</th>
<th>Irritant</th>
<th>Sensitize</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>E (severe) / S (mild) / R (mild)</td>
<td>No</td>
</tr>
<tr>
<td>Quarternary Ammonium Chloride</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Alkyl Dimethyl Amine Oxide</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Sodium Ethylene Diamine Tetraacetate</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Liquefied Petroleum Gas</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**Reproductive Toxicity:** No information available

**Teratogenicity:** No information available

**Mutagenicity:** No information available

**Synergistic Effects:** No information available

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## Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

**Ecotoxicity:**
- Sodium Ethylene Diamine Tetraacetate 96 Hr LC50, Bluegill sunfish: 490 mg/L
- 2-Butoxyethanol 96 Hr LC50, Bluegill sunfish: 1490 mg/L
- 96 Hr LC50, daphnia: 1720 mg/L

**Persistence / Degradability:** No information available

**Bioaccumulation / Accumulation:** No information available

**Mobility in Environment:** No information available

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## Section 13: Disposal Considerations

**Waste Classification:** The dispensed liquid product is not a RCRA hazardous waste. Pressurized containers are a D003 reactive waste. (See 40 CFR Part 261.20 – 261.33)

Empty aerosol containers may be recycled.

All disposal activities must comply with federal, state, provincial and local regulations. Local regulations may be more stringent than state, provincial or national requirements.

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## Section 14: Transport Information

**US DOT (ground):** Consumer Commodity, ORM-D

**ICAO/IATA (air):** Consumer Commodity, ID8000, 9

**IMO/IMDG (water):** Aerosols, UN1950, 2.2, Limited Quantity

**Special Provisions:** None
Section 15: Regulatory Information

U.S. Federal Regulations:

Toxic Substances Control Act (TSCA):

All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Reportable Quantities (RQ’s) exist for the following ingredients:  None

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS):  None

Section 311/312 Hazard Categories:

Fire Hazard  No
Reactive Hazard  No
Release of Pressure  Yes
Acute Health Hazard  Yes
Chronic Health Hazard  No

Section 313 Toxic Chemicals:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

2-Butoxyethanol (glycol ethers)

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs):  None

U.S. State Regulations:

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm:  None

Consumer Products VOC Regulations:  In states with Consumer Products VOC regulations, this product is compliant as a General Purpose Cleaner

State Right to Know:

New Jersey:  111-76-2, 68476-85-7
Pennsylvania:  111-76-2, 68476-85-7
Massachusetts:  111-76-2, 68476-85-7
Rhode Island:  111-76-2, 68476-85-7

Canadian Regulations:

Canadian DSL Inventory:  All ingredients are either listed on the DSL Inventory or are exempt.

WHMIS Hazard Class:  A, D2B

European Union Regulations:


Additional Regulatory Information:  EPA Registration # 706-65-55809.  This product is registered in all 50 United States.
Section 16: Other Information

<table>
<thead>
<tr>
<th>HMIS® (II)</th>
<th>NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health: 1</td>
<td>1</td>
</tr>
<tr>
<td>Flammability: 1</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity: 0</td>
<td>1</td>
</tr>
<tr>
<td>PPE: B</td>
<td></td>
</tr>
</tbody>
</table>

Ratings range from 0 (no hazard) to 4 (severe hazard)

Prepared By: Michelle Rudnick
CRC #: 14430
Revision Date: 06/18/2010

Changes since last revision: Section 15: Additional Regulatory Information revised

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this MSDS consult your supervisor, a health & safety professional, or CRC Industries.

ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Service
CFR: Code of Federal Regulations
DOT: Department of Transportation
DSL: Domestic Substance List
g/L: grams per Liter
HMIS: Hazardous Materials Identification System
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods
IMO: International Maritime Organization
lbs./gal: pounds per gallon
LC: Lethal Concentration
LD: Lethal Dose
NA: Not Applicable
ND: Not Determined
NIOSH: National Institute of Occupational Safety & Health
NFPA: National Fire Protection Association
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PMCC: Pensky-Martens Closed Cup
PPE: Personal Protection Equipment
ppm: Parts per Million
RoHS: Restriction of Hazardous Substances
STEL: Short Term Exposure Limit
TCC: Tag Closed Cup
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Information System