

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 274
Product name **ECO COIL Foaming Coil Cleaner**
Effective date 21-Jan-2013
Company information Ricmar Industries
889 N. Larch
Elmhurst, IL 60126 United States
Company phone General Assistance 800-323-0779
Emergency telephone US 1-866-836-8855
Emergency telephone outside US 1-952-852-4646
Version # 02
Supersedes date 08-Jan-2013

2. Hazards Identification

Emergency overview Aerosol. CONTENTS UNDER PRESSURE.
Prolonged exposure may cause chronic effects.

Potential health effects

Routes of exposure Inhalation.

Eyes Health injuries are not known or expected under normal use.

Skin Health injuries are not known or expected under normal use.

Inhalation Intentional misuse by concentrating and inhaling the product can be harmful or fatal.

Ingestion Exposure by ingestion of an aerosol is unlikely.

Target organs Central nervous system.

Chronic effects May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage.

Signs and symptoms Narcosis.

3. Composition / Information on Ingredients

| Components | CAS # | Percent |
|--|----------|---------|
| n-Butane | 106-97-8 | 3 - 5 |
| Propane | 74-98-6 | 1 - 3 |
| Non-hazardous and other components below reportable levels | | > 90 |

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. Get medical attention if irritation develops and persists.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower.

Inhalation If symptoms develop move victim to fresh air. Get medical attention if symptoms persist.

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

Notes to physician Symptoms may be delayed.

5. Fire Fighting Measures

Flammable properties Runoff to sewer may cause fire or explosion hazard.

Protection of firefighters

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 cleaning up 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 prolonged exposure.

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 container dry. Keep away from food, drink and animal feedingstuffs. Level 1 Aerosol (NFPA 30B)

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH

| Components | CAS # | TWA | STEL | Ceiling |
|------------|----------|----------|-----------------|-----------------|
| n-Butane | 106-97-8 | 1000 ppm | Not established | Not established |
| Propane | 74-98-6 | 1000 ppm | Not established | Not established |

OSHA

| Components | CAS # | TWA | STEL | Ceiling |
|------------|---------|----------|-----------------|-----------------|
| Propane | 74-98-6 | 1000 ppm | Not established | Not established |

Personal protective equipment

Eye / face protection Not normally needed.

Skin protection No special protective equipment required.

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

9. Physical & Chemical Properties

Appearance Not available

Boiling point 204.8 °F (96.1 °C) estimated

Color Opaque. Off-white.

Density 0.8856 g/cm³ estimated

Flammability (HOC) 2.6107 kJ/g estimated

Flash back No

Flash point -156 °F (-104.4 °C) Propellant

Form Aerosol.

Freezing point Not available

Odor Pleasant.

pH 8.5 - 9.5

Physical state Liquid.

Pressure 55 psig @70F

Solubility Partially

Specific gravity 0.8857 estimated

10. Chemical Stability & Reactivity Information

Chemical stability Risk of ignition.

Conditions to avoid Avoid high temperatures.

Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological Information

Component analysis - LD50

Toxicology Data - Selected LD50s and LC50s

| | | |
|----------|----------|----------------------------------|
| 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 |

12. Ecological Information

Ecotoxicity Not expected to be harmful to aquatic organisms.

13. Disposal Considerations

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

Disposal instructions Contents under pressure. Do not puncture, incinerate or crush. Dispose of this material and its container to hazardous or special waste collection point. 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 | Aerosols |
| Hazard class | 2.1 |
| UN number | UN1950 |
| Additional information: | |
| Special provisions | 153, N82 |
| Packaging exceptions | 306 |
| Packaging non bulk | None |
| Packaging bulk | None |



Further information

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2013, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/13 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

IMDG

Basic shipping requirements:

| | |
|--------------------------------|----------|
| Proper shipping name | AEROSOLS |
| Hazard class | 2.1 |
| UN number | UN1950 |
| Additional information: | |
| Packaging exceptions | LTD QTY |
| Labels required | None |



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.

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

None

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 - No
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

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

| | | |
|----------|----------|---------|
| 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: 2
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 Product and Company Identification: Product and Company Identification
Physical & Chemical Properties: Physical & Chemical Properties
Transport Information: Further information

Prepared by Regulatory Compliance