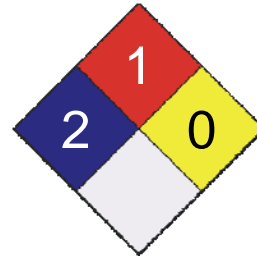


## 1. Product and Company Identification

<b>Product Name</b>	<b>Evap Foam No Rinse-Aerosol (4171)</b>
<b>CAS #</b>	Mixture
<b>Product use</b>	Cleaner
<b>Manufacturer</b>	Nu-Calgon 2008 Altom Court St. Louis, MO 63146 US Phone: 314-469-7000 / 800-554-5499 Emergency Phone: 1-800-424-9300 (CHEMTREC)

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 2
Flammability	1
Physical Hazard	0
Personal Protection	X



## 2. Hazards Identification

<b>Emergency overview</b>	<b>WARNING</b> Contents under pressure. Containers may explode when heated. May cause severe irritation or burns to the eyes, skin, gastrointestinal tract, and respiratory system.
<b>Potential short term health effects</b>	
<b>Routes of exposure</b>	Eye, Skin contact, Skin absorption, Inhalation, Ingestion.
<b>Eyes</b>	May cause severe irritation or chemical burns.
<b>Skin</b>	As per Policy Issue Sheet Number 60, strongly acidic or alkaline substances with a demonstrated pH of 2 or less or 11.5 or greater, need not be tested for primary dermal irritation, owing to their predictable corrosive properties. In lieu of skin corrosivity test data on animals, this product is considered corrosive in Canada based on the pH of the product as a whole.  May cause severe irritation or chemical burns. May be absorbed through the skin.
<b>NIOSH - Pocket Guide - Skin Notations</b>	
Ethylene glycol monobutyl ether    111-76-2	Potential for dermal absorption
<b>Inhalation</b>	Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness). Aspiration of material into lungs can cause chemical pneumonitis.
<b>Ingestion</b>	Not a normal route of exposure. May cause stomach distress, nausea or vomiting.
<b>Target organs</b>	Blood. Eyes. Kidney. Liver. Respiratory system. Skin.
<b>Chronic effects</b>	Prolonged or repeated exposure can cause drying, defatting and dermatitis.
<b>Signs and symptoms</b>	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

## 3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Petroleum gases, liquefied, sweetened	68476-86-8	3 - 7
Diethylene glycol monoethyl ether	111-90-0	1 - 5
Ethylene glycol monobutyl ether	111-76-2	1 - 5
Tetrasodium ethylenediamine tetraacetate	64-02-8	1 - 5

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## 4. First Aid Measures

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### First aid procedures

- Eye contact** Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.
- Skin contact** Immediately flush with water. Wash with soap and water. Obtain medical attention if irritation persists.
- Inhalation** If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention. If breathing has stopped, trained personnel should administer CPR immediately.
- Ingestion** Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration.

### General advice

Keep away from sources of ignition. No smoking. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

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## 5. Fire Fighting Measures

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### Flammable properties

Non-flammable aerosol by flame projection test.  
Aerosol flame extension: None  
Containers may explode when heated.

### Extinguishing media

- Suitable extinguishing media** Carbon dioxide. Dry chemical. Foam.
- Unsuitable extinguishing media** Not available

### Protection of firefighters

- Specific hazards arising from the chemical** Contents under pressure. Pressurized container may explode when exposed to heat or flame. Cool containers with flooding quantities of water until well after fire is out.
- Protective equipment for firefighters** Firefighters should wear full protective clothing including self contained breathing apparatus.

### Hazardous combustion products

May include and are not limited to: Oxides of carbon.

### Explosion data

- Sensitivity to mechanical impact** Not available
- Sensitivity to static discharge** Not available
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## 6. Accidental Release Measures

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### Personal precautions

Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.

### 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. Prevent entry into waterways, sewers, basements or confined areas.

### Methods for cleaning up

Before attempting clean up, refer to hazard data given above. Remove sources of ignition. Although the chance of a significant spill or leak is unlikely in aerosol containers, in the event of such an occurrence, absorb spilled material with a non-flammable absorbent such as sand or vermiculite.

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## 7. Handling and Storage

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### Handling

Use good industrial hygiene practices in handling this material. Do not get this material in your eyes, on your skin, or on your clothing.

### Storage

Keep out of reach of children. Do not store at temperatures above 49 °C (120.2°F). Keep away from heat, open flames or other sources of ignition.

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## 8. Exposure Controls / Personal Protection

Exposure limits	
Ingredient(s)	Exposure Limits
Diethylene glycol monoethyl ether	<b>ACGIH-TLV</b> TWA: 25 ppm <b>OSHA-PEL</b> Not established
Ethylene glycol monobutyl ether	<b>ACGIH-TLV</b> TWA: 20 ppm <b>OSHA-PEL</b> TWA: 50 ppm
Petroleum gases, liquefied, sweetened	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Tetrasodium ethylenediamine tetraacetate	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> TWA: 15 mg/m3
<b>Engineering controls</b>	General ventilation normally adequate.
<b>Personal protective equipment</b>	
<b>Eye / face protection</b>	Wear chemical goggles.
<b>Hand protection</b>	Rubber gloves. Confirm with a reputable supplier first.
<b>Skin and body protection</b>	As required by employer code.
<b>Respiratory protection</b>	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

## 9. Physical and Chemical Properties

<b>Appearance</b>	Compressed liquefied gas
<b>Color</b>	Milky
<b>Form</b>	Aerosol.
<b>Odor</b>	Lemon lime
<b>Odor threshold</b>	Not available
<b>Physical state</b>	Gas
<b>pH</b>	12.3
<b>Melting point</b>	Not available
<b>Freezing point</b>	Not available
<b>Boiling point</b>	388.40 - 401.00 °F (198 - 205 °C)
<b>Pour point</b>	Not available
<b>Evaporation rate</b>	Not available
<b>Flash point</b>	Not available
<b>Auto-ignition temperature</b>	Not available
<b>Flammability limits in air, lower, % by volume</b>	Not available
<b>Flammability limits in air, upper, % by volume</b>	Not available
<b>Vapor pressure</b>	65 Psi @ 70°F
<b>Vapor density</b>	Not available
<b>Specific gravity</b>	Not available
<b>Octanol/water coefficient</b>	Not available

<b>Solubility (H2O)</b>	Not available
<b>VOC (Weight %)</b>	Not available
<b>Viscosity</b>	Not available
<b>Percent volatile</b>	Not available

## 10. Stability and Reactivity

<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Reacts violently with acids. This product may react with oxidizing agents. Do not mix with other chemicals. Aerosol containers are unstable at temperatures above 49°C (120.2°F).
<b>Incompatible materials</b>	Acids. Oxidizing agents.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.

## 11. Toxicological Information

### Component analysis - LC50

Ingredient(s)	LC50
Diethylene glycol monoethyl ether	Not available
Ethylene glycol monobutyl ether	2.21 mg/l/4h rat
Petroleum gases, liquefied, sweetened	Not available
Tetrasodium ethylenediamine tetraacetate	Not available

### Component analysis - Oral LD50

Ingredient(s)	LD50
Diethylene glycol monoethyl ether	5500 mg/kg rat
Ethylene glycol monobutyl ether	470 mg/kg rat; 320 mg/kg rabbit
Petroleum gases, liquefied, sweetened	Not available
Tetrasodium ethylenediamine tetraacetate	2000 mg/kg rat

### Effects of acute exposure

<b>Eye</b>	May cause severe irritation or chemical burns.
<b>Skin</b>	As per Policy Issue Sheet Number 60, strongly acidic or alkaline substances with a demonstrated pH of 2 or less or 11.5 or greater, need not be tested for primary dermal irritation, owing to their predictable corrosive properties. In lieu of skin corrosivity test data on animals, this product is considered corrosive in Canada based on the pH of the product as a whole.  May cause severe irritation or chemical burns. May be absorbed through the skin.

### NIOSH - Pocket Guide - Skin Notations

Ethylene glycol monobutyl ether 111-76-2 Potential for dermal absorption

**Inhalation** Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).  
Aspiration of material into lungs can cause chemical pneumonitis.

**Ingestion** Not a normal route of exposure. May cause stomach distress, nausea or vomiting.

**Sensitization** Non-hazardous by WHMIS/OSHA criteria.

**Chronic effects** Non-hazardous by WHMIS/OSHA criteria.

**Carcinogenicity** See below.

### ACGIH - Threshold Limit Values - Carcinogens

Ethylene glycol monobutyl ether 111-76-2 A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

### IARC - Group 3 (Not Classifiable)

Ethylene glycol monobutyl ether 111-76-2 Monograph 88 [2006]

**Mutagenicity** Non-hazardous by WHMIS/OSHA criteria.

**Reproductive effects** Non-hazardous by WHMIS/OSHA criteria.

**Teratogenicity** Non-hazardous by WHMIS/OSHA criteria.

**Synergistic Materials** Not available

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## 12. Ecological Information

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**Ecotoxicity** Components of this product have been identified as having potential environmental concerns.

### Ecotoxicity - Freshwater Algae Data

Tetrasodium ethylenediamine tetraacetate 64-02-8 72 Hr EC50 *Desmodesmus subspicatus*: 1.01 mg/L

### Ecotoxicity - Freshwater Fish Species Data

Diethylene glycol monoethyl ether 111-90-0 96 Hr LC50 *Oncorhynchus mykiss*: 11400-15700 mg/L [flow-through]; 96 Hr LC50 *Pimephales promelas*: 11600-16700 mg/L [flow-through]; 96 Hr LC50 *Lepomis macrochirus*: 10000 mg/L [static]; 96 Hr LC50 *Lepomis macrochirus*: 19100-23900 mg/L [flow-through]; 96 Hr LC50 *Salmo gairdneri*: 13400 mg/L [flow-through]  
Ethylene glycol monobutyl ether 111-76-2 96 Hr LC50 *Lepomis macrochirus*: 1490 mg/L [static]; 96 Hr LC50 *Lepomis macrochirus*: 2950 mg/L  
Tetrasodium ethylenediamine tetraacetate 64-02-8 96 Hr LC50 *Lepomis macrochirus*: 41 mg/L [static]; 96 Hr LC50 *Pimephales promelas*: 59.8 mg/L [static]

### Ecotoxicity - Water Flea Data

Diethylene glycol monoethyl ether 111-90-0 48 Hr EC50 *Daphnia magna*: 3940 - 4670 mg/L  
Ethylene glycol monobutyl ether 111-76-2 24 Hr EC50 *Daphnia magna*: 1698 - 1940 mg/L; 48 Hr EC50 *Daphnia magna*: >1000 mg/L  
Tetrasodium ethylenediamine tetraacetate 64-02-8 24 Hr EC50 *Daphnia magna*: 610 mg/L

**Environmental effects** Not available  
**Aquatic toxicity** Not available  
**Persistence / degradability** Not available  
**Bioaccumulation / accumulation** Not available  
**Partition coefficient** Not available  
**Mobility in environmental media** Not available  
**Chemical fate information** Not available  
**Other adverse effects** Not available

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## 13. Disposal Considerations

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**Waste codes** Not available  
**Disposal instructions** Dispose in accordance with all applicable regulations.  
**Waste from residues / unused products** Not available  
**Contaminated packaging** Not available

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## 14. Transport Information

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### U.S. Department of Transportation (DOT)

CONSUMER COMMODITY ORM-D

### Transportation of Dangerous Goods (TDG - Canada)

CONSUMER COMMODITY

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## 15. Regulatory Information

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**Canadian federal regulations** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

### Canada - CEPA - Schedule I - List of Toxic Substances

Ethylene glycol monobutyl ether 111-76-2 Present

### Canada - WHMIS - Ingredient Disclosure List

Diethylene glycol monoethyl ether 111-90-0 1 %  
Ethylene glycol monobutyl ether 111-76-2 1 %

### 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

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**CERCLA (Superfund) reportable quantity**

Sodium nitrite: 100.0000  
Ammonium hydroxide: 1000.0000  
Sodium hydroxide: 1000.0000

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - Yes  
Reactivity Hazard - No

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** Yes

**Clean Air Act (CAA)** Not available

**Clean Water Act (CWA)** Not available

**WHMIS status** Controlled

**WHMIS classification** Class A - Compressed Gas, Class E - Corrosive Material

**WHMIS labeling**



**State regulations**

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances**

Ethylene glycol monobutyl ether 111-76-2 Present

**U.S. - Massachusetts - Right To Know List**

Ethylene glycol monobutyl ether 111-76-2 Present

**U.S. - Minnesota - Hazardous Substance List**

Diethylene glycol monoethyl ether 111-90-0 Present

Ethylene glycol monobutyl ether 111-76-2 Skin

**U.S. - New Jersey - Right to Know Hazardous Substance List**

Ethylene glycol monobutyl ether 111-76-2 sn 0275

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

Ethylene glycol monobutyl ether 111-76-2 Present

**U.S. - Rhode Island - Hazardous Substance List**

Ethylene glycol monobutyl ether 111-76-2 Toxic (skin)

**Inventory name**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	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)

**16. Other Information**

**Disclaimer**

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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**Prepared by**

Nu-Calgon Technical Service (314) 469-7000

**Other information**

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.