# SAFETY DATA SHEET

Sid Harvey item # 4166-75 SDS # Z0400

## 1. Product and Company Identification

**Product identifier** **Evap-Fresh No Rinse Evaporator Cleaner & Disinfectant (4166-75)**

**Other means of identification** Not available

**Recommended use** Cleaner / Disinfectant / Mildewstat / Deodorizer

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

**Company name** Nu-Calgon

**Address** 2008 Altom Court
St. Louis, MO 63146
United States

**Telephone** 314-469-7000 / 800-554-5499

**E-mail** info@nucalgon.com

**Emergency phone number** 1-800-424-9300 (CHEMTREC)

## 2. Hazards Identification

| | | |
|---|---|---|
| **Physical hazards** | Gases under pressure | Liquefied gas |
| **Health hazards** | Skin corrosion/irritation | Category 2 |
| | Serious eye damage/eye irritation | Category 2 |

**Environmental hazards** Not classified.

**OSHA defined hazards** Not classified.

**Label elements**

**Signal word** Warning

**Hazard statement** Contains gas under pressure; may explode if heated.
Causes skin irritation.
Causes serious eye irritation.

**Precautionary statement**

**Prevention** Wash thoroughly after handling. Wear protective gloves. Wear eye/face protection.

**Response** If on skin: Wash with plenty of water. Specific treatment (see this label). If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Storage** Protect from sunlight. Store in a well-ventilated place.

**Disposal** Dispose of waste and residues in accordance with local authority requirements.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** This is a registered EPA product. The product labeling is in compliance with EPA regulations and guidelines.

## 3. Composition/Information on Ingredients

**Mixtures**

| Chemical name | Common name and synonyms | CAS number | % |
|---|---|---|---|
| Butane | | 106-97-8 | 1-5 |
| Diethylene glycol monobutyl ether | | 112-34-5 | 1-5 |
| Propane | | 74-98-6 | 1-5 |
| Tetrasodium ethylenediamine tetraacetate | | 64-02-8 | 1-5 |

| | |
|---|---|
| **Composition comments** | US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200. |

## 4. First Aid Measures

| | |
|---|---|
| **Inhalation** | Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice. |
| **Skin contact** | If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice. |
| **Eye contact** | Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. |
| **Ingestion** | If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. |
| **Most important symptoms/effects, acute and delayed** | Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. |
| **Indication of immediate medical attention and special treatment needed** | Probable mucosal damage may contraindicate the use of gastric lavage. |
| **General information** | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |

## 5. Fire Fighting Measures

| | |
|---|---|
| **Suitable extinguishing media** | Alcohol resistant foam. Carbon dioxide. Dry chemical. |
| **Unsuitable extinguishing media** | Do not use water jet. |
| **Specific hazards arising from the chemical** | Contents under pressure. |
| **Special protective equipment and precautions for firefighters** | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. |
| **Fire-fighting equipment/instructions** | In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. |
| **Specific methods** | Cool containers exposed to flames with water until well after the fire is out. |

## 6. Accidental Release Measures

| | |
|---|---|
| **Personal precautions, protective equipment and emergency procedures** | Keep unnecessary personnel away. Keep out of low areas. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. |
| **Methods and materials for containment and cleaning up** | Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS. |
| **Environmental precautions** | Avoid discharge into drains, water courses or onto the ground. |

## 7. Handling and Storage

| | |
|---|---|
| **Precautions for safe handling** | Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Ground and bond containers when transferring material. Do not re-use empty containers. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid contact with eyes, skin and clothing. |
| **Conditions for safe storage, including any incompatibilities** | Contents under pressure. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Protect from sunlight. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).<br><br>It is a violation of Federal law to use this product in a manner inconsistent with its labeling. |

## 8. Exposure Controls/Personal Protection

**Occupational exposure limits**

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

| Components | Type | Value |
|---|---|---|
| Propane (CAS 74-98-6) | PEL | 1800 mg/m3<br>1000 ppm |

**US. ACGIH Threshold Limit Values**

| Components | Type | Value | Form |
|---|---|---|---|
| Butane (CAS 106-97-8) | STEL | 1000 ppm | |
| Diethylene glycol monobutyl ether (CAS 112-34-5) | TWA | 10 ppm | Inhalable fraction and vapor. |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components | Type | Value |
|---|---|---|
| Butane (CAS 106-97-8) | TWA | 1900 mg/m3<br>800 ppm |
| Propane (CAS 74-98-6) | TWA | 1800 mg/m3<br>1000 ppm |

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin protection**

**Hand protection** Wear appropriate chemical resistant gloves.

**Other** Not available.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards** Not applicable.

**General hygiene considerations** When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and Chemical Properties

**Appearance** Spray

**Physical state** Gas Liquid under pressure via propellant.

**Form** Aerosol. Liquefied gas.

**Color** Clear

**Odor** Lemon

**Odor threshold** Not available.

**pH** 12.5

**Melting point/freezing point** Not available.

**Initial boiling point and boiling range** Not available.

**Pour point** Not available.

**Specific gravity** 1.005 g/mL

**Partition coefficient (n-octanol/water)** Not available.

**Flash point** Not available.

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not applicable.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)** Not available.

**Flammability limit - upper (%)** Not available.

| | |
|---|---|
| **Explosive limit - lower (%)** | Not available. |
| **Explosive limit - upper (%)** | Not available. |
| **Vapor pressure** | Not available. |
| **Vapor density** | Not available. |
| **Relative density** | Not available. |
| **Solubility(ies)** | Not available. |
| **Auto-ignition temperature** | Not available. |
| **Decomposition temperature** | Not available. |
| **Viscosity** | Not available. |
| **Other information** | |
| **Heat of combustion** | 4.57 kJ/g |
| **VOC (Weight %)** | 5.0% by weight (US federal, CARB/OTC/LADCO) |

## 10. Stability and Reactivity

| | |
|---|---|
| **Reactivity** | Reacts vigorously with acids. |
| **Possibility of hazardous reactions** | No dangerous reaction known under conditions of normal use. |
| **Chemical stability** | Material is stable under normal conditions. |
| **Conditions to avoid** | Reacts violently with strong acids. This product may react with oxidizing agents. Do not mix with other chemicals. |
| **Incompatible materials** | Oxidizing agents. Acids. |
| **Hazardous decomposition products** | May include and are not limited to: Oxides of carbon. Oxides of nitrogen. |

## 11. Toxicological Information

**Information on likely routes of exposure**

| | |
|---|---|
| **Ingestion** | Expected to be a low ingestion hazard. |
| **Inhalation** | Prolonged inhalation may be harmful. |
| **Skin contact** | Causes skin irritation. |
| **Eye contact** | Causes serious eye irritation. |
| **Symptoms related to the physical, chemical and toxicological characteristics** | Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. |

**Information on toxicological effects**

**Acute toxicity**

| **Components** | **Species** | **Test Results** |
|---|---|---|
| Butane (CAS 106-97-8) | | |
| **Acute** | | |
| *Inhalation* | | |
| LC50 | Mouse | 680 mg/L, 2 Hours |
| | Rat | 276000 ppm, 4 Hours |
| | | 658 mg/l/4h |
| *Oral* | | |
| LD50 | Not available | |
| Diethylene glycol monobutyl ether (CAS 112-34-5) | | |
| **Acute** | | |
| *Dermal* | | |
| LD50 | Rabbit | 2700 mg/kg |
| *Inhalation* | | |
| LC50 | Not available | |
| *Oral* | | |
| LD50 | Guinea pig | 2000 mg/kg |
| | Mouse | 2400 mg/kg |
| | Rabbit | 2200 mg/kg |
| | Rat | 3384 mg/kg |

| Components | Species | Test Results |
|---|---|---|
| Propane (CAS 74-98-6) | | |
| **Acute** | | |
| *Inhalation* | | |
| LC50 | Rat | > 1442.8 mg/L, 15 Minutes |
| *Oral* | | |
| LD50 | Not available | |
| Tetrasodium ethylenediamine tetraacetate (CAS 64-02-8) | | |
| **Acute** | | |
| *Dermal* | | |
| LD50 | Not available | |
| *Inhalation* | | |
| LC50 | Not available | |
| *Oral* | | |
| LD50 | Rat | 1658 mg/kg |

**Skin corrosion/irritation** Causes skin irritation.

**Exposure minutes** Not available.

**Erythema value** Not available.

**Oedema value** Not available.

**Serious eye damage/eye irritation** Causes serious eye irritation.

**Corneal opacity value** Not available.

**Iris lesion value** Not available.

**Conjunctival reddening value** Not available.

**Conjunctival oedema value** Not available.

**Recover days** Not available.

**Respiratory or skin sensitization**

**Respiratory sensitization** Not available.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not likely, due to the form of the product.

**Chronic effects** Prolonged inhalation may be harmful.

**Further information** Not available.

## 12. Ecological Information

**Ecotoxicity** See below

| Components | | Species | Test Results |
|---|---|---|---|
| Diethylene glycol monobutyl ether (CAS 112-34-5) | | | |
| Crustacea | EC50 | Daphnia | 2850 mg/L, 48 Hours |
| **Aquatic** | | | |
| Fish | LC50 | Bluegill (Lepomis macrochirus) | 1300 mg/L, 96 hours |
| Tetrasodium ethylenediamine tetraacetate (CAS 64-02-8) | | | |
| Algae | EC50 | Algae | 1.01 mg/L, 72 Hours |
| **Aquatic** | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 610 mg/L, 24 hours |

| Components | | Species | Test Results |
|---|---|---|---|
| Fish | LC50 | Bluegill (Lepomis macrochirus) | 472 - 500 mg/L, 96 hours |

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential** No data available.

**Partition coefficient n-octanol / water (log Kow)**

| | |
|---|---|
| Butane | 2.89 |
| Diethylene glycol monobutyl ether | 0.56 |
| Propane | 2.36 |

**Mobility in soil** No data available.

**Mobility in general** Not available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal Considerations

**Disposal instructions** Container Disposal: Nonrefillable container. Do not reuse empty container. Do not puncture or incinerate. IF EMPTY: Place in trash or offer for recycling if available. IF PARTLY FILLED: Call your local waste agency for disposal instructions. Consult authorities before disposal. Contents under pressure. Do not puncture, incinerate or crush. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

## 14. Transport Information

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

**Basic shipping requirements:**

**UN number** UN1950
**Proper shipping name** Aerosols, non-flammable, (each not exceeding 1 L capacity)
**Hazard class** Limited Quantity - US
**Packaging exceptions** <1L - Limited Quantity
**Packaging non bulk** None
**Packaging bulk** None

**IATA/ICAO (Air)**

**Basic shipping requirements:**

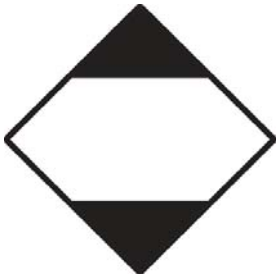
**UN number** UN1978
**Proper shipping name** Aerosols, non-flammable
**Hazard class** Limited Quantity - IATA
<1L - Limited Quantity

**IMDG (Marine Transport)**

**Basic shipping requirements:**

**UN number** UN1950
**Proper shipping name** AEROSOLS
**Hazard class** Limited Quantity - IMDG
<1L - Limited Quantity

**DOT; IMDG**



**IATA**


## 15. Regulatory Information

**US federal regulations**

This is an EPA registered product. This material can only be used commercially in the EPA registered application(s) noted on the product label.
EPA Reg. # 1839-84-65516

PRECAUTIONARY STATEMENTS: HAZARDS TO HUMANS AND DOMESTIC ANIMALS.
WARNING
KEEP OUT OF THE REACH OF CHILDREN. Causes eye and skin irritation. Do not get in eyes, on skin or on clothing. Harmful if swallowed. Avoid contamination of food. Remove contaminated clothing and wash before reuse. Wash thoroughly with soap and water after handling.

Contents under pressure. Do not puncture. Do not use or store near open flame. Exposure to temperatures above 130°F may cause bursting. Never throw container into fire or incinerator.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

| | |
|---|---|
| Butane (CAS 106-97-8) | Listed. |
| Diethylene glycol monobutyl ether (CAS 112-34-5) | Listed. |
| Propane (CAS 74-98-6) | Listed. |

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**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

**SARA 302 Extremely hazardous substance**

No

**SARA 311/312 Hazardous chemical**

No

**SARA 313 (TRI reporting)**

| Chemical name | CAS number | % by wt. |
|---|---|---|
| Diethylene glycol monobutyl ether | 112-34-5 | 1-5 |

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Diethylene glycol monobutyl ether (CAS 112-34-5)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Butane (CAS 106-97-8)
Propane (CAS 74-98-6)

**Safe Drinking Water Act (SDWA)**

Not regulated.

**Food and Drug Administration (FDA)**

Not regulated.

**US state regulations**

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

**US - California Hazardous Substances (Director's): Listed substance**

Butane (CAS 106-97-8) Listed.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**US - Illinois Chemical Safety Act: Listed substance**

| | |
|---|---|
| Butane (CAS 106-97-8) | Listed. |
| Diethylene glycol monobutyl ether (CAS 112-34-5) | Listed. |

| | |
|---|---|
| Propane (CAS 74-98-6) | Listed. |

**US - Louisiana Spill Reporting List: Reportable quantity (total mass into atmosphere)**

| | |
|---|---|
| Diethylene glycol monobutyl ether (CAS 112-34-5) | 100 LBS |

**US - Louisiana Spill Reporting: Listed substance**

| | |
|---|---|
| Butane (CAS 106-97-8) | Listed. |
| Diethylene glycol monobutyl ether (CAS 112-34-5) | Listed. |
| Propane (CAS 74-98-6) | Listed. |

**US - Minnesota Haz Subs: Listed substance**

| | |
|---|---|
| Butane (CAS 106-97-8) | Listed. |
| Propane (CAS 74-98-6) | Listed. |

**US - New Jersey RTK - Substances: Listed substance**

| | |
|---|---|
| Butane (CAS 106-97-8) | Listed. |
| Diethylene glycol monobutyl ether (CAS 112-34-5) | Listed. |
| Propane (CAS 74-98-6) | Listed. |

**US - Texas Effects Screening Levels: Listed substance**

| | |
|---|---|
| Butane (CAS 106-97-8) | Listed. |
| Diethylene glycol monobutyl ether (CAS 112-34-5) | Listed. |
| Propane (CAS 74-98-6) | Listed. |
| Tetrasodium ethylenediamine tetraacetate (CAS 64-02-8) | Listed. |

**US. Massachusetts RTK - Substance List**

| | |
|---|---|
| Butane (CAS 106-97-8) | Listed. |
| Propane (CAS 74-98-6) | Listed. |

**US. Pennsylvania RTK - Hazardous Substances**

| | |
|---|---|
| Butane (CAS 106-97-8) | Listed. |
| Diethylene glycol monobutyl ether (CAS 112-34-5) | Listed. |
| Propane (CAS 74-98-6) | Listed. |

**US. Rhode Island RTK**

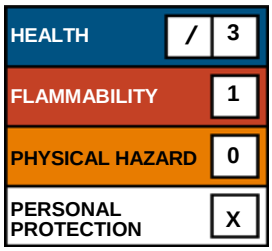
| | |
|---|---|
| Butane (CAS 106-97-8) | Listed. |
| Diethylene glycol monobutyl ether (CAS 112-34-5) | Listed. |
| Propane (CAS 74-98-6) | Listed. |

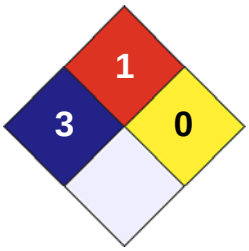
| Country(s) or region | Inventory name | On inventory (yes/no)* |
|---|---|---|
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

## 16. Other Information

| LEGEND | |
|---|---|
| Severe | 4 |
| Serious | 3 |
| Moderate | 2 |
| Slight | 1 |
| Minimal | 0 |




**Disclaimer**

The information in the sheet was written based on the best knowledge and experience currently available. 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.

**Issue date** 18-September-2015

**Further information** For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.

**Other information** This Safety Data Sheet was prepared to comply with the current OSHA Hazard Communication Standard (HCS) adoption of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Prepared by** Nu-Calgon Technical Service Phone: (314) 469-7000

Nu-Calgon Wholesaler, Inc.

# MATERIAL SAFETY DATA SHEET

## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

| Company Name | Phone Number | | | CHEMTREC |
|---|---|---|---|---|
| Nu-Calgon Wholesaler, Inc. | (314) 469-7000 / (800) 554-5499 | | | (800) 424-9300 |
| **Street Address** | **City** | **State** | **Postal Code** | **Last Update** |
| 2008 Altom Court | St. Louis | MO | 63146-4151 | 11/22/06 |
| **Product Name** | **Product Number** | **Product Use** | | **EPA Registration #** |
| Cal-Spray Evap-Fresh Coil Cleaner & Disinfeetant | 4166-75 | Foaming Evaporator Coil Cleaner & Disinfectant | | 1839-84-65516 |

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Ingredients | % By Wt. | CAS Number | TLV | PEL |
|---|---|---|---|---|
| Isobutane | 5 | 75-28-5 | No Data. | No Data. |
| Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride | 0.1 | 85409-23-0 | No Data. | No Data. |
| Alkyl (60% C14, 30% C16, 5% C12, 5%C18) dimethyl benzyl ammonium ehloride | 0.1 | 68391-01-5 | No Data. | No Data. |

## SECTION 3 – HAZARD IDENTIFICATION

**Emergency Overview:** Clear liquid, Danger! Flammable, Irritant. May eause moderate irritation to the eyes. May cause moderate irritation to the skin. May be harmful if swallowed.

**Potential Health Effects**

**Eyes:** This product may cause moderate irritation to the eyes.

**Skin:** This product may cause moderate irritation to the skin.

**Ingestiou:** This product may be harmful if it is swallowed. may cause dizziness, ineoordination, headache, nausea, and vomiting.

**Inhalation:** High vapor or acrosol mist concentrations may be irritating to the nose, throat and upper respiratory tract. Effects may include headaches, dizziness, drowsincss, ancsthetie and may have other central nervous system effects.

**Chronic Exposure:** No Data

**Carcinogenicity:** No Data.

**Medical Conditions Aggravated be Exposure:** No Data.

## SECTION 4 – FIRST AID MEASURES

**Eyes:** immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Seek medical attention at once.

**Skin:** For skin contact flush with large amounts of water. Immediately take off all contaminated clothing. If irritation persists, seek medical attention. Wash contaminated clothing before reuse.

**Ingestion:** If the material is swallowed, get immediate medical attention or advice. Do not induce vomiting. Never give anything by mouth to a victim who is unconscious or is having convulsions. if vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Note to Physician: If the product is ingested, probable mucosal damage may contraindicate the use of gastric lavage. Treat the affected person appropriatly.

**Inhalation:** If symptoms are experienced, remove source of contamination or move victim to fresh air. If not breathing, give artifical respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. If symptoms persist, get medical attention.

## SECTION 5 – FIREFIGHTING MEASURES

**Flash Point:** <73°F

**Autoignition Temp:** 462°C/863.6°F

**Hazardous Products of Combustion:** May form carbon monoxide.

**Flammable Limits in Air:** OSHA Flammability Class: Flammable IA

**Extinguishing Media:** Dry chemical, foam, carbon dioxide, water fog.

**Fire and Explosion Hazards:** CONTENTS UNDER PRESSURE. Do not use near fire, sparks or flame. Do not puncture or incinerate container. Exposure to temperature above 120°F may cause bursting.

**Special Firefighting Procedures:** Firefighters should wear full fire-fighting turn-out gear(full Bunker gear) including NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Isolate spill or leak area immediately. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Wear appropriate personal protective equipment during cleanup. Stop leak if you ean do it without risk. Do not touch or walkthrough spilled material. Small Spills: Absorb or cover with dry earth, sand or other non-combustible material & transfer to containers. Use clean non-sparking tools to collect absorbed material. Large Spills: Dike ahead of liquid spill for later disposal. Prevent entry into waterways, sewers, basements or confined areas.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures and Equipment:** Avoid contact with skin, eyes & clothing. Avoid breathing mists or aerosols of this product. Keep product from heat, sparks, or open flame. Eliminate all sources of ignition. Wash hands before eating, drinking, smoking, or using toilet facilities. As with all chemicals, good industrial hygiene practices should be followed when handling this material.

**Storage Requirements:** Store in dry place no lower in temperature than 50°F or higher than 120°F. Do not pressurize, cut, heat or weld containers. Empty product containers may contain product residue. Do not reuse empty eontainers. DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** Under normal conditions, respirator is not normally required. If vapors are present or irritation is experienced, NIOSH approved respiratory protection for ammoniacal vapors should be worn.

**Eye Protection:** Wear chemical goggles and face shield.

**Protective Clothing:** Work clothing sufficient to prevent all skin contact should be worn, such as coveralls and long sleeves. Use impervious gloves.

**Exposure Guidelines:** No Data.

**Specific Engineering Controls (such as ventilation, enclosed process):** Provide adequatelocal exhaust ventilation to maintain worker exposure below exposure limits. Eye wash fountain and emergency showers are recommended.
Isobutane 75-28-5
ACGIH - Occupational Exposure Limits - TWAs 1000ppm TWA
NIOSH - Pocket Guide - Target Organs CNS
NIOSH - Pocket Guide - TWAs 800ppm TWA; 1900mg/m3 TWA

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|---|---|---|
| **Physical Form:** Liquid | **Freezing Point:** Not est.°C/Not est.°F | **% Volatile by Weight:** >90% |
| **Color:** Clear | **Vapor Density [air =1]:** Heavier that air | **Evaporation Rate:** Faster than Butyl Acetate |
| **Odor:** No Data. | **Vapor Pressure:** No Data. | **Specific Gravity:** (0.962 g/ml), 8 lb/gal |
| **Boiling Point:** <35°C/<95°F | **Solubility in Water:** No Data. | **pH (concentrate):** 11.7 (as is) |

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** Stable under normal conditions.

**Hazardous Polymerization:** Will not occur.

**Incompatibilities:** This product may react with strong oxidizing agents, anionic compounds.

**Reactive Conditions to avoid:** Keep away from heat, sparks, or open flame.

**Decomposition Products:** Upon decomposition, this product may yield oxides of nitrogen and ammonia.

## SECTION 11 – TOXICOLOGICAL INFORMATION

| Hazardous Ingredients | CAS # | EINECS # | LD 50 of Ingredient (Specify Species) | LC50 of Ingredieut (Specify Species) |
|---|---|---|---|---|
| Isobutane | 75-28-5 | | | Inhalation Rat: 57pph/15M |
| | | | | |
| | | | | |
| | | | | |

## SECTION 12 – ECOLOGICAL INFORMATION

| Hazardous Ingredients | Aquatic Toxicity Data |
|---|---|
| No Data | |
| | |
| | |
| | |

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal:** Container Disposal: Replace cap & dispose of container in trash. Do not incinerate or puncture. Treatment, storage, transportation & disposal must be in accordance with applicable Federal, State/Provincial & Local regulations. Regulations may vary in different locations. Characterization & compliance with applicable laws are the responsibility solely of the generator.
Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a Federal Law. If these wastes cannot be disposed of by use according to label instructions contact your State Pesticide or Environmental Control Agency, or the hazardous Waste representative at the nearest EPA Regional Office for guidance.

## SECTION 14 – TRANSPORTATION INFORMATION

**Special Shipping Information:** No Data.

| Purview | Proper Shipping Name | UN Number | Packing Group | Hazard Class |
|---|---|---|---|---|
| **DOT** (Land) | Consumer Commodity | 1950 | 16 oz. Aerosol Can | (ORM)-D |
| **IMO** (Water) | No data | No data | No data | No data |
| **ICAO** (Air) | No data | No data | No data | No data |

## SECTION 15 – REGULATORY INFORMATION

| | |
|---|---|
| **WHMIS Classificatiou:** (Workplace Hazardous Material Information System) | No Data. |
| **SARA Title III:** (Superfund Amendments & Reauthorization Act) | This product may contain the following ingredients known to the State of California to cause cancer, birth defects or other reproductive harm: Nitrilotriacetic acid (NTA) (CAS RN: 139-13-9)Ethylene Oxide (CAS RN: 75-21-8) |
| **OSHA:** (Occupational Safety & Health Administration) | No data |
| **TSCA:** (Toxic Substance Control Act) | This product is considered a pesticide, and is therefore excluded from US TSCA Regulations. |
| **VOC:** (volatile Organic Compounds) | RVOC 5% (Isobutane) |
| **CPR:** (Canadian Controlled Products Regulations) | This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations. |
| **EINECS:** (European Inventory of Existing Commercial Chemical Substances) | No data |
| **DSL / NDSL:** (Canadian Domestic Substance List)(Non-Domestic Substance List) | No data |
| **CERCLA:** (Comprehensive Response Compensation & Liability Act) | No data |
| **IDL:** (Canadian Ingredient Disclosure List) | No data |
| **NFPA (HMIS) Rating:** (Hazardous Materials Identification System) | Health: 2 Flammability: 4 Reactivity: 0 |

## SECTION 16 – OTHER INFORMATION

No Data.