


## 1. Identification

<b>Product identifier</b>	<b>TRI-POW'R HD COIL CLEANER AEROSOL (4371-75)</b>
<b>Other means of identification</b>	Not available.
<b>Recommended use</b>	Heavy Duty Cleaner/Degreaser
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Manufacturer</b>	
<b>Company name</b>	Nu-Calgon
<b>Address</b>	2611 Schuetz Road St. Louis, MO 63043 United States
<b>Telephone</b>	314-469-7000 / 800-554-5499
<b>E-mail</b>	Not available.
<b>Emergency phone number</b>	1-800-424-9300 (CHEMTREC)
<b>Supplier</b>	See above.

## 2. Hazard identification

<b>Physical hazards</b>	Gases under pressure	Liquefied gas
	Corrosive to metals	Category 1
<b>Health hazards</b>	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
<b>Environmental hazards</b>	Not classified.	
<b>WHMIS 2015 defined hazards</b>	Not classified	
<b>Label elements</b>		
<b>Signal word</b>	Danger	
<b>Hazard statement</b>	Contains gas under pressure; may explode if heated. May be corrosive to metals. Causes severe skin burns and eye damage.	
<b>Precautionary statement</b>		
<b>Prevention</b>	Keep only in original packaging. Do not breathe mist or vapor. Wash thoroughly after handling. Wear protective gloves, protective clothing, eye protection and face protection.	
<b>Response</b>	Absorb spillage to prevent material-damage. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. Specific treatment (see information on this label). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
<b>Storage</b>	Store in a corrosion resistant container with a resistant inner liner. Store locked up. Protect from sunlight. Store in a well-ventilated place.	
<b>Disposal</b>	Dispose of container in accordance with local, regional, national and international regulations.	
<b>WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC)</b>	None known	
<b>WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)</b>	None known	
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.	
<b>Supplemental information</b>	None.	

### 3. Composition/Information on ingredients

#### Mixture

Chemical name	Common name and synonyms	CAS number	%
Butane		106-97-8	1-5*
Morpholine		110-91-8	0.1-1*
Potassium hydroxide		1310-58-3	1-5*
Propane		74-98-6	1-5*
Silicic acid, sodium salt		1344-09-8	1-5*
Sodium carbonate		497-19-8	1-5*

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**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.  
\*CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. First-aid measures

<b>Inhalation</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.
<b>Skin contact</b>	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. Specific treatment (see information on this label).
<b>Eye contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
<b>Ingestion</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.
<b>Most important symptoms/effects, acute and delayed</b>	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Symptoms may be delayed.
<b>General information</b>	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. Wear rubber gloves and chemical splash goggles. Keep out of reach of children.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Foam. Carbon dioxide. Dry powder.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed. Firefighters should wear a self-contained breathing apparatus.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters should wear full protective clothing including self-contained breathing apparatus.
<b>Fire-fighting equipment/instructions</b>	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. 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.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers exposed to flames with water until well after the fire is out. In the event of fire and/or explosion do not breathe fumes.
<b>General fire hazards</b>	Contents under pressure. Pressurized container may explode when exposed to heat or flame.
<b>Hazardous combustion products</b>	May include and are not limited to: Oxides of carbon.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Refer to attached safety data sheets and/or instructions for use. 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. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent entry into waterways, sewer, basements or confined areas. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Keep away from heat, sparks, open flames, hot surfaces. - No smoking. Do not smoke while using or until sprayed surface is thoroughly dry. 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 cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Use only with adequate ventilation. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Do not re-use empty containers. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. When using do not eat or drink.
<b>Conditions for safe storage, including any incompatibilities</b>	Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not handle or store near an open flame, heat or other sources of ignition. Do not puncture, incinerate or crush. This material can accumulate static charge which may cause spark and become an ignition source. Store in a corrosion resistant container with a resistant inner liner. Store in a well-ventilated place. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS). Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Stored containers should be periodically checked for general condition and leakage.

## 8. Exposure controls/Personal protection

### Occupational exposure limits

#### Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Butane (CAS 106-97-8)	TWA	1000 ppm
Morpholine (CAS 110-91-8)	TWA	71 mg/m <sup>3</sup> 20 ppm
Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m <sup>3</sup>
Propane (CAS 74-98-6)	TWA	1000 ppm

#### Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
Butane (CAS 106-97-8)	STEL	1000 ppm
Morpholine (CAS 110-91-8)	TWA	20 ppm
Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m <sup>3</sup>

#### Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value
Butane (CAS 106-97-8)	STEL	1000 ppm

**Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)**

Components	Type	Value
Morpholine (CAS 110-91-8)	TWA	20 ppm
Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3

**Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**

Components	Type	Value
Butane (CAS 106-97-8)	STEL	1000 ppm
Morpholine (CAS 110-91-8)	TWA	20 ppm
Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3

**Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)**

Components	Type	Value
Butane (CAS 106-97-8)	TWA	1900 mg/m3 800 ppm
Morpholine (CAS 110-91-8)	TWA	71 mg/m3 20 ppm
Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3
Propane (CAS 74-98-6)	TWA	1800 mg/m3 1000 ppm

**Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)**

Components	Type	Value
Butane (CAS 106-97-8)	15 minute	1250 ppm
	8 hour	1000 ppm
Morpholine (CAS 110-91-8)	15 minute	30 ppm
	8 hour	20 ppm
Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3
Propane (CAS 74-98-6)	15 minute	1250 ppm
	8 hour	1000 ppm

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

Components	Type	Value
Morpholine (CAS 110-91-8)	PEL	70 mg/m3 20 ppm
Propane (CAS 74-98-6)	PEL	1800 mg/m3 1000 ppm

**US. ACGIH Threshold Limit Values**

Components	Type	Value
Butane (CAS 106-97-8)	STEL	1000 ppm
Morpholine (CAS 110-91-8)	TWA	20 ppm
Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3

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

Components	Type	Value
Butane (CAS 106-97-8)	TWA	1900 mg/m3 800 ppm
Morpholine (CAS 110-91-8)	STEL	105 mg/m3 30 ppm
	TWA	70 mg/m3 20 ppm
Potassium hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m3
Propane (CAS 74-98-6)	TWA	1800 mg/m3 1000 ppm

**Biological limit values** No biological exposure limits noted for the ingredient(s).  
**Exposure guidelines** Chemicals listed in section 3 that are not listed here do not have established limit values for ACGIH or OSHA PEL.

**Canada - Alberta OELs: Skin designation**

Morpholine (CAS 110-91-8) Can be absorbed through the skin.

**Canada - British Columbia OELs: Skin designation**

Morpholine (CAS 110-91-8) Can be absorbed through the skin.

**Canada - Manitoba OELs: Skin designation**

Morpholine (CAS 110-91-8) Can be absorbed through the skin.

**Canada - Ontario OELs: Skin designation**

Morpholine (CAS 110-91-8) Can be absorbed through the skin.

**Canada - Quebec OELs: Skin designation**

Morpholine (CAS 110-91-8) Can be absorbed through the skin.

**Canada - Saskatchewan OELs: Skin designation**

Morpholine (CAS 110-91-8) Can be absorbed through the skin.

**US ACGIH Threshold Limit Values: Skin designation**

Morpholine (CAS 110-91-8) Can be absorbed through the skin.

**US NIOSH Pocket Guide to Chemical Hazards: Skin designation**

Morpholine (CAS 110-91-8) Can be absorbed through the skin.

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

Morpholine (CAS 110-91-8) Can be absorbed through the skin.

**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. Eye wash fountain and emergency showers are recommended.

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

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

**Skin protection**

**Hand protection** Impervious gloves. Confirm with reputable supplier first.

**Other** Wear appropriate chemical resistant clothing. As required by employer code.

**Respiratory protection**

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).

**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. When using do not eat or drink.

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## 9. Physical and chemical properties

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<b>Appearance</b>	Aerosol.
<b>Physical state</b>	Gas.
<b>Form</b>	Aerosol
<b>Color</b>	Orange
<b>Odor</b>	Pine
<b>Odor threshold</b>	Not available.
<b>pH</b>	13.3 (Concentrate)
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	212 °F (100 °C)
<b>Pour point</b>	Not available.
<b>Specific gravity</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	UN Manual of Tests & Criteria, Part 3, Section 31.5 - Enclosed Space Ignition Test The finished product is not expected to be flammable as per test data.

**Upper/lower flammability or explosive limits**

<b>Flammability limit - lower (%)</b>	Not available
<b>Flammability limit - upper (%)</b>	Not available
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.

**Vapor pressure** Not available

**Vapor density** Not available

**Relative density** 1.13

**Solubility(ies)** Not available.

**Auto-ignition temperature** Not available

**Decomposition temperature** Not available.

**Viscosity** Not available.

**Other information**

**Explosive properties** Not explosive.

**Oxidizing properties** Not oxidizing.

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## 10. Stability and reactivity

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**Reactivity** Reacts violently with strong acids. This product may react with oxidizing agents. May be corrosive to metals.

**Possibility of hazardous reactions** Hazardous polymerization does not occur.

**Chemical stability** Stable under recommended storage conditions.

**Conditions to avoid** Heat. Do not mix with other chemicals.

**Incompatible materials** Strong oxidizing agents. Metals.

**Hazardous decomposition products** May include and are not limited to: Oxides of carbon.

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## 11. Toxicological information

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**Routes of exposure** Eye, Skin contact, Inhalation, Ingestion.

**Information on likely routes of exposure**

**Ingestion** Causes digestive tract burns. May cause stomach distress, nausea or vomiting.

**Inhalation** May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

**Skin contact** Causes severe skin burns.

**Eye contact** Causes serious eye damage.

**Symptoms related to the physical, chemical and toxicological characteristics** Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

**Information on toxicological effects**

**Acute toxicity** Causes burns.

Components	Species	Test Results
Butane (CAS 106-97-8)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Not available	
<i>Inhalation</i>		
LC50	Mouse	539600 ppm, 120 Minutes, ECHA 520400 ppm, 120 Minutes, ECHA
	Rat	> 800000 ppm, 10 Minutes, ECHA 1442738 mg/m <sup>3</sup> , 15 Minutes, ECHA 1443 mg/L, 15 Minutes, ECHA
<i>Oral</i>		
LD50	Not available	

Components	Species	Test Results
Morpholine (CAS 110-91-8)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	500 mg/kg, 24 Hours, ECHA
<i>Inhalation</i>		
LC50	Rat	8 mg/L, ECHA
<i>Oral</i>		
LD50	Rat	1900 mg/kg, ECHA
Potassium hydroxide (CAS 1310-58-3)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Not available	
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Rat	333 mg/kg, ECHA
Propane (CAS 74-98-6)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Not available	
<i>Inhalation</i>		
LC50	Rat	1442738 mg/m3, 15 Minutes, ECHA 1443 mg/L, 15 Minutes, ECHA
<i>Oral</i>		
LD50	Not available	
Silicic acid, sodium salt (CAS 1344-09-8)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rat	> 5000 mg/kg, 24 Hours, ECHA
<i>Inhalation</i>		
LC50	Rat	> 2.1 mg/L, 4 Hours, ECHA
<i>Oral</i>		
LD50	Rat	3400 mg/kg, ECHA
Sodium carbonate (CAS 497-19-8)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg, ECHA
<i>Inhalation</i>		
LC50	Guinea pig	800 mg/m3, 2 Hours, ECHA
	Mouse	1200 mg/m3, 2 Hours, ECHA
	Rat	2300 mg/m3, 2 Hours, ECHA
<i>Oral</i>		
LD50	Rat	2800 mg/kg, ECHA, HSDB
<b>Skin corrosion/irritation</b>	Causes severe skin burns and eye damage.	
<b>Exposure minutes</b>	Not available.	
<b>Erythema value</b>	Not available.	
<b>Oedema value</b>	Not available.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.	
<b>Corneal opacity value</b>	Not available.	
<b>Iris lesion value</b>	Not available.	
<b>Conjunctival reddening value</b>	Not available.	
<b>Conjunctival oedema value</b>	Not available.	

**Recover days** Not available.

## Respiratory or skin sensitization

### Canada - Alberta OELs: Irritant

Potassium hydroxide (CAS 1310-58-3) Irritant

**Respiratory sensitization** Not a respiratory sensitizer.

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

**Mutagenicity** Not classified.

**Carcinogenicity** Not classified. See below.

### IARC Monographs. Overall Evaluation of Carcinogenicity

Morpholine (CAS 110-91-8) Volume 47, Volume 71 - 3 Not classifiable as to carcinogenicity to humans.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not listed.

**Reproductive toxicity** Not classified.

**Teratogenicity** Not classified.

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

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

**Aspiration hazard** Not classified.

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

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## 12. Ecological information

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**Ecotoxicity** See below

### Ecotoxicological data

Components		Species	Test Results
Morpholine (CAS 110-91-8)			
<b>Aquatic</b>			
Fish	LC50	Zebra danio (Danio rerio)	> 1 mg/L, 96 hours
Potassium hydroxide (CAS 1310-58-3)			
<b>Aquatic</b>			
Fish	LC50	Western mosquitofish (Gambusia affinis)	80 mg/L, 96 hours
Silicic acid, sodium salt (CAS 1344-09-8)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	0.28 - 0.57 mg/L, 48 hours
Fish	LC50	Western mosquitofish (Gambusia affinis)	1800 mg/L, 96 hours
Sodium carbonate (CAS 497-19-8)			
Crustacea	EC50	Daphnia	265 mg/L, 48 Hours
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	156.6 - 298.9 mg/L, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	300 mg/L, 96 hours

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

**Bioaccumulative potential** No data available.

**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.

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## 13. Disposal considerations

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**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. 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** D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]  
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**

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

## 14. Transport information

**Transport of Dangerous Goods (TDG) Proof of Classification**

Classification Method: Classified as per Part 2, Sections 2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.

**General**

UN Manual of Tests & Criteria, Part 3, Section 31.5 - Enclosed Space Ignition Test The finished product is not expected to be flammable as per test data.

IMDG Regulated Marine Pollutant.

IATA:

Aerosols, non-flammable, containing substances in Class 8, Packing Group II, Forbidden

**U.S. Department of Transportation (DOT)****Basic shipping requirements:**

**UN number** UN1950  
**Proper shipping name** Aerosols, corrosive, Packing Group II or III, (each not exceeding 1 L capacity).  
**Hazard class** Limited Quantity - US  
**Special provisions** A34  
**Packaging exceptions** <1L - Limited Quantity

**Transportation of Dangerous Goods (TDG - Canada)****Basic shipping requirements:**

**UN number** UN1950  
**Proper shipping name** AEROSOLS, non-flammable, containing substances in Class 8, packing group II  
**Hazard class** Limited Quantity - Canada  
**Special provisions** 80  
**Packaging exceptions** <1L - Limited Quantity

**DOT; TDG**

## 15. Regulatory information

**Canadian federal regulations**

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

**Canada DSL Challenge Substances: Listed substance**

Butane (CAS 106-97-8) Listed.

**Canada NPRI VOCs with Additional Reporting Requirements: Mass reporting threshold/Identification Number**

Butane (CAS 106-97-8) 1 TONNES

Propane (CAS 74-98-6) 1 TONNES

**Export Control List (CEPA 1999, Schedule 3)**

Not listed.

**Greenhouse Gases**

Not listed.

**Precursor Control Regulations**

Not regulated.

**WHMIS 2015 Exemptions**

Not applicable

**US federal regulations**

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

**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.
Morpholine (CAS 110-91-8)	Listed.
Potassium hydroxide (CAS 1310-58-3)	Listed.
Propane (CAS 74-98-6)	Listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

Not listed.

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

**SARA 302 Extremely hazardous substance** No

**SARA 311/312 Hazardous chemical** Yes

**Classified hazard categories** Gas under pressure  
Corrosive to metal  
Skin corrosion or irritation  
Serious eye damage or eye irritation

**SARA 313 (TRI reporting)**

Not regulated.

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

Not regulated.

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

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

**Clean Water Act (CWA) Section 112(r) (40 CFR 68.130)** Hazardous substance

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

Butane (CAS 106-97-8)	Listed.
Morpholine (CAS 110-91-8)	Listed.
Potassium hydroxide (CAS 1310-58-3)	Listed.

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

Butane (CAS 106-97-8)  
Morpholine (CAS 110-91-8)  
Potassium hydroxide (CAS 1310-58-3)  
Propane (CAS 74-98-6)

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

Butane (CAS 106-97-8)	Listed.
Morpholine (CAS 110-91-8)	Listed.
Potassium hydroxide (CAS 1310-58-3)	Listed.
Propane (CAS 74-98-6)	Listed.

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

Butane (CAS 106-97-8)	Listed.
Morpholine (CAS 110-91-8)	Listed.
Potassium hydroxide (CAS 1310-58-3)	Listed.
Propane (CAS 74-98-6)	Listed.

**US - Texas Effects Screening Levels Hazard Data: Simple asphyxiant**

Propane (CAS 74-98-6)

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

Butane (CAS 106-97-8)	Listed.
Morpholine (CAS 110-91-8)	Listed.
Potassium hydroxide (CAS 1310-58-3)	Listed.
Propane (CAS 74-98-6)	Listed.
Silicic acid, sodium salt (CAS 1344-09-8)	Listed.
Sodium carbonate (CAS 497-19-8)	Listed.

**US. Massachusetts RTK - Substance List**

Butane (CAS 106-97-8)  
Morpholine (CAS 110-91-8)  
Potassium hydroxide (CAS 1310-58-3)  
Propane (CAS 74-98-6)

**US. New Jersey Worker and Community Right-to-Know Act**

Butane (CAS 106-97-8)  
 Morpholine (CAS 110-91-8)  
 Potassium hydroxide (CAS 1310-58-3)  
 Propane (CAS 74-98-6)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Butane (CAS 106-97-8)  
 Morpholine (CAS 110-91-8)  
 Potassium hydroxide (CAS 1310-58-3)  
 Propane (CAS 74-98-6)

**US. Rhode Island RTK**

Butane (CAS 106-97-8)  
 Morpholine (CAS 110-91-8)  
 Potassium hydroxide (CAS 1310-58-3)  
 Propane (CAS 74-98-6)

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**Inventory status**

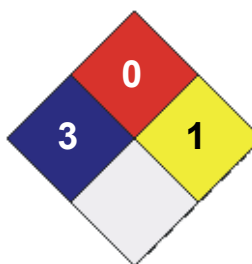
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

**16. Other information**

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

<b>HEALTH</b>	/ 3
<b>FLAMMABILITY</b>	0
<b>PHYSICAL HAZARD</b>	1
<b>PERSONAL PROTECTION</b>	X

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

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<b>Prepared by</b>	Nu-Calgon Technical Service Phone: (314) 469-7000
<b>Further information</b>	Not available.
<b>Other information</b>	For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.