



VAPCO PRODUCTS, INC.

Safety Data Sheet Foaming Cooling Coil Cleaner

SECTION 1: Identification

1.1 GHS Product identifier

Product name	Foaming Cooling Coil Cleaner
Product number	FCC-1
Brand	Vapco

1.3 Recommended use of the chemical and restrictions on use

All angle spray aerosol, evaporator coil cleaner

1.4 Supplier's details

Name	Vapco Products, Inc.
Address	401 Marshall Road Valley Park, Missouri 63088 United States
Telephone	(636) 923-2121
Fax	(636) 923-3002
email	info@VapcoProducts.com

1.5 Emergency phone number

(800) 255-3924

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200, 2012)

- Acute toxicity, inhalation, Cat. 4
- Eye damage/irritation, Cat. 1
- Flammable aerosols, Cat. 2
- Skin corrosion/irritation, Cat. 1

2.2 GHS label elements, including precautionary statements

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Pictograms



Signal word

Danger

Hazard statement(s)

H223	Flammable aerosol
H314	Causes severe skin burns and eye damage
H332	Harmful if inhaled

Precautionary statement(s)

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Pressurized container: do not pierce or burn, even after use.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P312	Call a POISON CENTER/doctor if you feel unwell.
P321	Specific treatment (see First Aid on this label).
P363	Wash contaminated clothing before reuse.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. 2-Butoxyethanol

Concentration	1 - 10 % (weight)
EC no.	203-905-0
CAS no.	111-76-2
Index no.	603-014-00-0

2. Isopropyl alcohol

Concentration	1 - 10 % (weight)
EC no.	200-661-7
CAS no.	67-63-0
Index no.	603-117-00-0

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3. Potassium Hydroxide

Concentration	1 - 10 % (weight)
EC no.	215-181-3
CAS no.	1310-58-3
Index no.	019-002-00-8

4. Petroleum gases, liquified, sweetened, if they contain > 0.1% w/w Butadiene

Concentration	1 - 10 % (weight)
EC no.	270-705-8
CAS no.	68476-86-8
Index no.	649-203-00-1

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
If inhaled	First, take proper precautions to ensure your own safety before attempting rescue (e.g. wear appropriate respiratory protective equipment, use the buddy system), then remove the exposed person to fresh air. Keep at rest in a position comfortable for breathing. Get medical advice/attention.
In case of skin contact	Immediately drench affected area with water for at least 15 minutes. Remove contaminated clothing immediately. Obtain medical attention if irritation develops or persists.
In case of eye contact	Immediately rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.
If swallowed	Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2 Most important symptoms/effects, acute and delayed

Acute Health Hazards

Symptoms/Injuries: Harmful if inhaled. May cause irritation to eyes and skin.

Symptoms/Injuries After Skin Contact: Contact with liquid/gas escaping from the container may cause skin irritation, including but not limited to dermatitis or defatting.

Symptoms/Injuries After Eye Contact: Contact with vapors and/or liquid escaping the container may cause irritation with redness, tearing, and blurred vision.

Chronic Health Hazards: None known.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand. Note to physician: There is no specific treatment regimen. Treatment of over-exposure should be directed at the control of symptoms and the clinical condition of the patient.

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SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Water spray, fog, carbon dioxide (CO₂), alcohol-resistant foam, dry chemical, or sand. Use appropriate media for surrounding fire.

5.2 Specific hazards arising from the chemical

Explosion Hazard: Container may explode in heat of fire. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors.

Reactivity: Chemically active metals and acids.

5.3 Special protective actions for fire-fighters

Precautionary Fire Measures: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use dry chemical, foam, or carbon dioxide (CO₂). Do not breathe fumes from fire or vapors from decomposition. Do NOT fight fire when fire reaches containers. Evacuate area. Fight fire remotely due to the risk of explosion. Shut off all sources of ignition. Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Wear NIOSH-approved Self-Contained Breathing Apparatus with a full face piece operated in a positive pressure demand mode with full body protective clothing when fighting fires.

Hazardous Combustion Products: Carbon oxide(s) and various hydrocarbons.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe vapors, spray, mist, gas. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedure: Eliminate ignition sources first, then ventilate the area. Evacuate unnecessary personnel, isolate, and ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel. Stop leak if safe to do so.

6.3 Methods and materials for containment and cleaning up

For Containment: Ventilate the area. Contain any spills with dikes or absorbents to prevent further migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Eliminate all ignition sources. Ventilate area. Stop the ignition source of the release, if safe to do so. Consider the use of water spray to disperse vapors. Isolate the area until gas has dispersed. Ventilate and gas test area before entering. Take up liquid spill into absorbent material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Waste Disposal: Dispose of in accordance with local, regional, national, and international regulations. Containers may be hazardous when empty. Do not flame cut, braze, or weld. Product should be fully characterized prior to disposal (40 CFR 261).

Reference to other sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions for Safe Handling: Do not handle until all safety precautions have been read and understood. Avoid contact with skin, eyes and clothing. Do not breathe gas, mist, spray, vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not spray on open flame or other ignition source.

Additional Hazards When Processed: Do not pressurize, cut, or weld containers. Ruptured cylinders may rocket. Pressurized container: May burst if heated. Do not pierce or burn, even after use.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

Other Precautions: Keep out of reach of children. Follow label instructions. Vapors may collect in low lying areas.

7.2 Conditions for safe storage, including any incompatibilities

Technical Measures: Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed.

Storage Conditions: Store in a dry, cool place. Keep only in the original container in a cool, well-ventilated place away from ignition sources. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area.

Incompatible Materials: Strong acids.

Storage Temperature: <50°C/122°F.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. 2-Butoxyethanol (CAS: 111-76-2)

TWA (Inhalation): 20 ppm; 96.9 mg/m³; AU (AU/SWA)

Other advisory: Sk

STEL (Inhalation): 50 ppm; 242 mg/m³; AU (AU/SWA)

Other advisory: Sk

IOELV-LTEL (Inhalation): 98 mg/m³; EU (EU/OSHA)

Skin designation: Yes. List no. 1 under Council Directive 98/24/EC as amended. List last updated on 8/29/2023.

IOELV-LTEL (Inhalation): 20 ppm; EU (EU/OSHA)

Skin designation: Yes. List no. 1 under Council Directive 98/24/EC as amended. List last updated on 8/29/2023.

IOELV-STEL (Inhalation): 246 mg/m³; EU (EU/OSHA)

Skin designation: Yes. List no. 1 under Council Directive 98/24/EC as amended. List last updated on 8/29/2023.

IOELV-STEL (Inhalation): 50 ppm; EU (EU/OSHA)

Skin designation: Yes. List no. 1 under Council Directive 98/24/EC as amended. List last updated on 8/29/2023.

PEL (Inhalation): 50 ppm; US (US/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 240 mg/m³; US (US/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 20 ppm; US (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): 5 ppm; US (NIOSH)

OSHA Annotated Table Z-1, www.osha.gov

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2. Potassium hydroxide (CAS: 1310-58-3)

TWA (Inhalation): 2 Peak limitation mg/m³; AU (AU/SWA)

3. Isopropyl alcohol (CAS: 67-63-0)

TWA (Inhalation): 400 ppm; 983 mg/m³; AU (AU/SWA)

STEL (Inhalation): 500 ppm; 1230 mg/m³; AU (AU/SWA)

PEL (Inhalation): 400 ppm; US (US/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 980 mg/m³; US (US/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 400 ppm, (ST) 500 ppm; US (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): 400 ppm, (ST) 500 ppm; US (NIOSH)

OSHA Annotated Table Z-1, www.osha.gov

8.2 Appropriate engineering controls

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Use explosion-proof equipment. Proper grounding procedures to avoid static electricity should be followed. Use only outdoors or in well-ventilated area. Ensure all local, regional, national, and international regulations are being observed. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Chemical safety goggles. Insufficient ventilation: wear respiratory protection. Respiratory protection of the dependent type.

Skin protection

Wear protective gloves and clothing.

Body protection

Wear suitable protective clothing. Wear protective gloves. Chemical resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.

Respiratory protection

Use a NIOSH-approved Self-Containing Breathing Apparatus whenever exposure may exceed established Occupational Exposure Limits.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Aerosol spray
Color	Colorless
Odor	Citrus scent, moderate ammonia odor
Odor threshold	N/D
Melting point/freezing point	<32°F (0°C)
Boiling point or initial boiling point and boiling range	N/D

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Flammability	Flammable aerosol
Lower and upper explosion limit/flammability limit	N/D
Flash point	N/D
Auto-ignition temperature	N/D
Decomposition temperature	N/D
pH	11.8-12.8
Kinematic viscosity	N/D
Solubility	Soluble in water
Partition coefficient n-octanol/water (log value)	N/D
Vapor pressure	23.8 mmHg at 25°C (77°F)
Evaporation rate	<0.8 (Slow)
Density and/or relative density	1.00 at 77°F (25°C)
Relative vapor density	1 (Air=1)

Supplemental information regarding physical hazard classes

Volatile Organic Compounds: <15%

SECTION 10: Stability and reactivity

10.1 Reactivity

Chemically active metals and acids.

10.2 Chemical stability

Stable under normal conditions of use.

10.3 Possibility of hazardous reactions

None known.

10.4 Conditions to avoid

Temperatures greater than 122°F may cause bursting.

10.5 Incompatible materials

Strong acids.

10.6 Hazardous decomposition products

Carbon oxide(s).

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

2-Butoxyethanol

LD50 Oral - Rat - 470 mg/kg

LC50 Inhalation - Rat - 450 ppm

Isopropanol

LD50 Oral - 5,045 mg/kg

LC50 Inhalation - Rat - 16000 ppm - 8 hrs

LD50 Skin - Rabbit - 12,800 mg/kg

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Potassium hydroxide
LD50 Oral Rat 333 mg/kg

Skin corrosion/irritation

Causes irritation, dermatitis with long-term exposure.

Serious eye damage/irritation

Causes irritation, may cause mild burns if left untreated.

Respiratory or skin sensitization

Harmful if inhaled. May cause irritation to skin.

Germ cell mutagenicity

Not classified.

Carcinogenicity

Not classified.

Reproductive toxicity

Not classified.

Specific target organ toxicity (STOT) - single exposure

May cause eye irritation with redness, tearing, and blurred vision.

Specific target organ toxicity (STOT) - repeated exposure

May cause eye irritation with redness, tearing, and blurred vision.

Aspiration hazard

The ATE (gas inhalation) of the mixture is: 7000 ppmV.

The ATE (vapor inhalation) of the mixture is: 30 mg/l.

The ATE (oral) of the mixture is: 2500 mg/kg bw.

Additional information

Acute Health Hazards

Symptoms/Injuries: Harmful if inhaled. May cause irritation to eyes and skin.

Symptoms/Injuries After Skin Contact: Contact with liquid/gas escaping from the container may cause skin irritation, including but not limited to dermatitis or defatting.

Symptoms/Injuries After Eye Contact: Contact with vapors and/or liquid escaping the container may cause irritation with redness, tearing, and blurred vision.

Chronic Health Hazards: None known.

Medical Condition Aggravated: Asthma, bronchitis, emphysema and other lung diseases and chronic nose, sinus or throat condition. Skin irritation may be aggravated in individuals with existing skin disorders.

SECTION 12: Ecological information

Toxicity

2-Butoxyethanol

LC50 - Oncorhynchus mykiss (rainbow trout) - 1,474 mg/l - 96 hrs

LC50 - Daphnia magna (water flea) - 1,550 mg/l - 48 hrs

LC50 - Pseudokirchneriella subcapitata (green algae) - 911 mg/l - 72 hrs

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Isopropanol

LC50 - Pimephales promelas (fathead minnow) - 9,640 mg/l - 96 hrs

EC50 - Daphnia magna (water flea) - 5,102 mg/l - 24 hrs

EC50 - Daphnia magna (water flea) - 6,851 mg/l - 24 hrs

EC50 - Desmodemus subspicatus (chodat) - >2,000 mg/l - 72 hrs

EC50 - Algae - >1,000 mg/l - 24 hrs

Potassium hydroxide

LC50 - Gambusia affinis (mosquito fish) - 80 mg/l - 96 hrs

Persistence and degradability

This product is biodegradable.

Bioaccumulative potential

This product is not expected to bioaccumulate.

Mobility in soil

This product is mobile in soil.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Dispose of contents/container in accordance with local, regional, national, and international regulations. Do not pierce or burn, even after use.

Other disposal recommendations

Container may remain hazardous when empty. Continue to observe all precautions. Do not puncture or incinerate container. Product should be fully characterized prior to disposal.

SECTION 14: Transport information

DOT (US)

UN Number: UN1950

Class: 2.1

Packing Group: N/A

Proper Shipping Name: Aerosols, flammable, (each not exceeding 1 L capacity)

IMDG

UN Number: UN1950

Class: 2.1

Packing Group: N/A

EMS Number: N/A

Proper Shipping Name: Aerosols, flammable, (each not exceeding 1 L capacity)

IATA

UN Number: UN1950

Class: 2.1

Packing Group: N/A

Proper Shipping Name: Aerosols, flammable, (each not exceeding 1 L capacity)

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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Massachusetts Right To Know Components (105 CMR 670)

Chemical name: 2-BUTOXYETHANOL

CAS number: 111-76-2

Chemical name: POTASSIUM HYDROXIDE

CAS number: 1310-58-3

Chemical name: 2-PROPANOL

CAS number: 67-63-0

Massachusetts Toxic Use Reduction Act (TURA) list

Chemical name: Potassium hydroxide

CAS number: 1310-58-3

Chemical name: Isopropyl alcohol (mfg-strong acid process)

CAS number: 67-63-0

New Jersey Right To Know Components

Common name: 2-BUTOXY ETHANOL

CAS number: 111-76-2

Common name: POTASSIUM HYDROXIDE

CAS number: 1310-58-3

Common name: ISOPROPYL ALCOHOL

CAS number: 67-63-0

Pennsylvania Right To Know Components

Chemical name: ETHANOL, 2-BUTOXY-

CAS number: 111-76-2

Chemical name: POTASSIUM HYDROXIDE (K(OH))

CAS number: 1310-58-3

Chemical name: 2-PROPANOL

CAS number: 67-63-0

US EPA TSCA public inventory

Chemical name: 2-Butoxyethanol

CAS number: 111-76-2

Chemical name: Potassium Hydroxide

CAS number: 1310-58-3

Chemical name: Isopropyl alcohol

CAS number: 67-63-0

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Chemical name: Petroleum gases, liquified, sweetened, if they contain > 0.1% w/w Butadiene
CAS number: 68476-86-8

SECTION 16: Other information

N/A = Not applicable; N/D = Not determined

16.1 Further information/disclaimer

To the best of our knowledge, information contained herein is accurate. However there is no assumption of liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazard which exists. The information contained in this SDS was obtained from current and reliable sources; however, the data is provided without warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions of handling, storage and disposal of this product are beyond the control of the manufacturer, the manufacturer will not be responsible for loss, injury, or expense arising out of the products improper use. No warranty, expressed or inferred, regarding the product described in this SDS shall be created or inferred by any statement in this SDS. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this SDS. The user is responsible for full compliance.

16.2 Preparation information

Prepared by: Jessica Wilson

Date prepared: 2-20-2025

