



VAPCO PRODUCTS, INC.

Safety Data Sheet Quad Power Aerosol

SECTION 1: Identification

GHS Product identifier

Product name	Quad Power Aerosol
Product number	QPA-1
Brand	Vapco

Recommended use of the chemical and restrictions on use
Coil Cleaner

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

Emergency phone number

(800) 255-3924

SECTION 2: Hazard identification

Classification of the substance or mixture

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

- Eye damage/irritation, Cat. 1
- Flammable aerosols, Cat. 2
- Gases under pressure, liquefied gas
- Skin corrosion/irritation, Cat. 1

GHS label elements, including precautionary statements

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Pictogram



Signal word

Danger

Hazard statement(s)

H223
H280
H314

Flammable aerosol
Contains gas under pressure; may explode if heated
Causes severe skin burns and eye damage

Precautionary statement(s)

P201
P202
P280
P308+P313
P405
P501

P260
P264
P301+P330+P331
P303+P361+P353

P363
P304+P340
P310
P321
P305+P351+P338

P210
P211
P251
P410+P412
P410+P403

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.
IF exposed or concerned: Get medical advice/attention.
Store locked up.
Dispose of contents/container to the specifications of local, regional, national, and international regulations.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash hands and other exposed areas thoroughly after handling.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
Wash contaminated clothing before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
Specific treatment (see First Aid on this label).
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Do not spray on an open flame or other ignition source.
Pressurized container: do not pierce or burn, even after use.
Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Protect from sunlight. Store in a well-ventilated place.

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

1. Petroleum gases, liquefied, 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

2. Butoxyethanol

Concentration	0.1 - 1 % (weight)
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EC no. 203-905-0
CAS no. 111-76-2
Index no. 603-014-00-0

3. Sodium metasilicate pentahydrate

Concentration 0.01 - 0.1 % (weight)
EC no. 229-912-9
CAS no. 6834-92-0
Index no. 014-010-00-8

4. Potassium hydroxide

Concentration 0.01 - 0.1 % (weight)
EC no. 215-181-3
CAS no. 1310-58-3
Index no. 019-002-00-8

SECTION 4: First-aid measures

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. Obtain medical attention if irritation develops or persists. Immediately take off all contaminated clothing.
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.

Most important symptoms/effects, acute and delayed

Symptoms/Injuries: Harmful if inhaled. Causes serious eye and skin irritation.

Symptoms/Injuries After Skin Contact: Contact causes severe irritation with burns. Dermatitis may occur due to long-term irritation.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of conjunctiva. Contact with gas/liquid escaping the container can cause permanent eye damage.

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: The absence of visible signs or symptoms of burns does not reliably exclude the presence of actual tissue damage.

SECTION 5: Fire-fighting measures

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Suitable extinguishing media

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

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: Stable under recommended storage conditions. May be corrosive to metals. Increased risk of fire or explosion. Certain mixtures of HFC's may be flammable or reactive under certain conditions.

Special protective actions for fire-fighters

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

Firefighting Instructions: Use water spray or fog for cooling exposed containers. Do not breathe fumes from fires or vapors from decomposition. Do NOT fight fire when fire reaches container. Evacuate area. Fight fire remotely due to the risk of explosion.

Protection During Firefighting: Do not enter fire area without the proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Sodium oxides, silicon oxides

SECTION 6: Accidental release measures

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 Non-Emergency Personnel

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

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

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Eliminate ignition sources first, then ventilate the area. Evacuate unnecessary personnel, isolate, and ventilate the 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.

Environmental precautions

Vapors can accumulate in low areas. Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Report spills as required by local and federal regulations.

Methods and materials for containment and cleaning up

Methods for Containment: Ventilate area. As an immediate precautionary measure, isolate spill or leak area in all directions. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Prevent further leakage or spillage if safe to do so.

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. Dilute spill with large quantities of water and flush area with water until clean. 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. May be subjected to disposal regulations: U.S. EPA 40 CFR 261.

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Reference to other sections

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

SECTION 7: Handling and storage

Precautions for safe handling

Additional Hazards When Processed: Do not pressurize, cut, or weld containers. Ruptured cylinders may rocket. Keep out of reach of children. Pressurized container: may burst if heated. Do not pierce or burn, even after use. Asphyxiating gas at high concentrations.

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 an open flame or other ignition source. Use only outdoors or in well-ventilated areas.

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

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 cool, dry 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 122°F (50°C). 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 and alkalis, or oxidizing agents.

Storage Temperature: < 122°F (50°C).

Specific end use(s)

Coil Cleaner

SECTION 8: Exposure controls/personal protection

Control parameters

CAS: 111-76-2 (EC: 203-905-0)

Butoxyethanol

20 ppm, 97 mg/m³ PEL inhalation; ACGIH (USA): 20 ppm TLV@ inhalation; 20 ppm TWA inhalation; Cal/OSHA: 20 ppm PEL inhalation; NIOSH: 5 ppm REL inhalation; 5 ppm, 24 mg/m³ TWA inhalation; OSHA: 50 ppm PEL inhalation; 240 mg/m³ PEL inhalation; 50 ppm, 240 mg/m³ TWA inhalation

CAS: 1310-58-3 (EC: 215-181-3)

Potassium hydroxide

ACGIH (USA): 2 mg/m³ PEL-C inhalation; 2 mg/m³ PEL-C inhalation; Cal/OSHA (USA): 2 mg/m³ PEL-C inhalation; NIOSH (USA): 2 mg/m³ PEL-C inhalation

CAS: 68476-86-8 (EC: 270-705-8)

Petroleum gases, liquefied, sweetened, if they contain > 0.1% w/w Butadiene

ACGIH (USA): 1000 ppm STEL inhalation; 1000 ppm TWA inhalation; Cal/OSHA (USA): 1000 ppm TWA inhalation; 1800 mg/m³ TWA inhalation; NIOSH (USA): 2100 ppm IDLH inhalation; 800 ppm TWA inhalation; 1800 mg/m³ TWA inhalation

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 area. Provide local exhaust ventilation where dust or

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mist may be generated. Ensure compliance with applicable limits. Use explosion-proof equipment. Proper grounding procedures to avoid static electricity should be followed. Ensure all local, regional, national, and international regulations are observed.

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

Pictograms



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. Chemically 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 and safety characteristics

Basic physical and chemical properties

Physical state	Liquid
Appearance	Aerosol
Color	Colorless
Odor	Fragrance
Odor threshold	N/D
Melting point/freezing point	N/D
Boiling point or initial boiling point and boiling range	N/D
Flammability	Flammable aerosol
Lower and upper explosion limit/flammability limit	N/D
Flash point	-104 °C/-156 °F
Explosive properties	N/D
Auto-ignition temperature	N/D
Decomposition temperature	N/D
Oxidizing properties	N/D
pH	11.0-12.0
Kinematic viscosity	N/D
Solubility	Completely soluble in water
Partition coefficient n-octanol/water (log value)	N/D
Vapor pressure	N/D
Evaporation rate	N/D
Density and/or relative density	1.005
Relative vapor density	N/D

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Particle characteristics

N/D

Supplemental information regarding physical hazard classes

VOC Content 6.47%

Further safety characteristics (supplemental)

N/D

SECTION 10: Stability and reactivity

Reactivity

Stable under recommended storage conditions. Certain mixtures of HFC's may be flammable or reactive under certain conditions.

Chemical stability

Contains gas under pressure; may explode if heated. Pressurized container: may burst if heated.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.

Incompatible materials

Strong acids and alkalis, or oxidizing agents.

Potassium hydroxide: Nitro compounds, Organic materials, Magnesium, Copper, Water, reacts violently with:, Metals, Light metals, Contact with aluminum, tin and zinc liberates hydrogen gas. Contact with nitromethane and other similar nitro compounds causes formation of shock-sensitive salts., vigorous reaction with:, Alkali metals, Halogens, Azides, Anhydrides

Hazardous decomposition products

Carbon oxides, potassium oxides, hydrocarbons, and fumes.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

The ATE (gas inhalation) of the mixture is: 450000 ppmV

2-Butoxyethanol

LD50 Oral - Rat - 880 mg/kg

LD50 Skin - Rabbit - 1,060 mg/kg

LD50 Intraperitoneal - Rat - 220 mg/kg

LD50 Intravenous - Rat - 307 mg/kg

LD50 Oral - Rat - 470 mg/kg

LC50 Inhalation - Rat - 450 ppm; Remarks: Behavioral: Ataxia. Nutritional and Gross Metabolic: Weight loss or decreased weight gain.

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IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (2-Butoxyethanol).

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

EC50 - Daphnia magna (water flea) - 1,550 mg/l - 48 h

EC50 - Pseudokirchneriella subcapitata (green algae) - 1,840 mg/l - 72 h

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

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

Potassium hydroxide

LD50 Oral - Rat - 333 mg/kg

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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

Skin corrosion/irritation

Causes skin irritation. Causes severe burns, prolonged contact will destroy tissue.

Serious eye damage/irritation

Irritating to eyes. Causes severe burns, irritation, redness, tearing, and pain.

Respiratory or skin sensitization

May cause irritation (possible severe), chemical burns, upper respiratory damage, and pulmonary edema.

Germ cell mutagenicity

Not a germ cell mutagen.

Carcinogenicity

No component of this product is present at levels greater than or equal to 0.1% that can be identified as a probable, possible or confirmed human carcinogen.

Reproductive toxicity

This product does not contain any known or suspected reproductive hazards.

STOT-single exposure

None known.

STOT-repeated exposure

None known.

Aspiration hazard

No information available.

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Additional information

Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest.

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

Symptoms/Injuries: Harmful if inhaled. Causes serious eye and skin irritation.

Symptoms/Injuries After Skin Contact: Contact causes severe irritation with burns. Dermatitis may occur due to long-term irritation.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of conjunctiva. Contact with gas/liquid escaping the container can cause permanent eye damage.

SECTION 12: Ecological information

Toxicity

2-Butoxyethanol

LD50 Oral - Rat - 880 mg/kg

LD50 Skin - Rabbit - 1,060 mg/kg

LD50 Intraperitoneal - Rat - 220 mg/kg

LD50 Intravenous - Rat - 307 mg/kg

LD50 Oral - Rat - 470 mg/kg

LC50 Inhalation - Rat - 450 ppm; Remarks: Behavioral: Ataxia. Nutritional and Gross Metabolic: Weight loss or decreased weight gain.

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NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (2-Butoxyethanol).

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

EC50 - *Daphnia magna* (water flea) - 1,550 mg/l - 48 h

EC50 - *Pseudokirchneriella subcapitata* (green algae) - 1,840 mg/l - 72 h

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

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

Potassium hydroxide

LD50 Oral - Rat - 333 mg/kg

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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

Persistence and degradability

No information is available.

Bioaccumulative potential

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Petroleum gases, liquefied, sweetened, if they contain > 0.1% w/w Butadiene; CAS 68476-86-8: Log Pow = 2.8
2-butoxyethanol; CAS 111-76-2: Log Pow = 0.81
Potassium hydroxide; CAS 1310-58-3: Log Pow = 0.83

Mobility in soil

This product is mobile in soil.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

This material, as supplied, is a hazardous waste according to federal regulations (U.S. EPA 40 CFR 261). Dispose of the contents/container in accordance with local, regional, national, and international regulations. Do not pierce or burn, even after use.

Waste treatment

This material, as supplied, is hazardous waste according to federal regulations (U.S. EPA 40 CFR 261). Dispose of in accordance with federal, state, and local regulations.

Other disposal recommendations

Container may remain hazardous when empty. Continue to observe all precautions. Do not puncture or incinerate container.

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

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)

SECTION 15: Regulatory information

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

California Prop. 65 Components

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

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Canadian Domestic Substances List (DSL)

Chemical name: Ethanol, 2-butoxy-
CAS: 111-76-2

Chemical name: Potassium hydroxide (K(OH))
CAS: 1310-58-3

CERCLA

This material, as supplied, does contain substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302): Potassium hydroxide CAS: 1310-58-3: 1000 lb

Clean Water Act

This product does contain the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42): Potassium hydroxide CAS: 1310-58-3: 1000 lb

Massachusetts Right To Know Components

Ethylene glycol monobutyl ether
CAS: 111-76-2

Potassium hydroxide
CAS-No. 1310-58-3

New Jersey Right To Know Components

Ethylene glycol monobutyl ether
CAS: 111-76-2

Potassium hydroxide
CAS-No. 1310-58-3

Pennsylvania Right To Know Components

Ethylene glycol monobutyl ether
CAS: 111-76-2

Potassium hydroxide
CAS-No. 1310-58-3

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Toxic Substances Control Act (TSCA) Inventory

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All components are listed or exempt.

HMIS Rating

Quad Power Aerosol	
HEALTH	2
FLAMMABILITY	4
PHYSICAL HAZARD	1
PERSONAL PROTECTION	B

NFPA Rating



SECTION 16: Other information

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.

Preparation information

Preparation by: Jessica Wilson

Date prepared: 6-3-2021