

## **VAPCO PRODUCTS, INC.**

# Safety Data Sheet Quad Power Liquid

#### **SECTION 1: Identification**

#### 1.1 GHS Product identifier

Product name

**Quad Power Liquid** 

Product number

QP-1, QP-5, QP-55

Brand

Vapco

## 1.3 Recommended use of the chemical and restrictions on use

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 email (636) 923-3002

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)

- Acute toxicity, oral, Cat. 4
- Eye damage/irritation, Cat. 1
- Skin corrosion/irritation, Cat. 1

## 2.2 GHS label elements, including precautionary statements

#### **Pictograms**



Signal word

Danger

**Hazard statement(s)** 

H302

Harmful if swallowed

H314

Causes severe skin burns and eye damage

Precautionary statement(s)

P260

Do not breathe dust/fume/gas/mist/vapors/spray.

P264

P270

Wash hands thoroughly after handling.

P280

Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312

IF SWALLOWED: Call a POISON CENTER /doctor if you feel unwell.

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 P321

Immediately call a POISON CENTER/doctor. Specific treatment (see First Aid on this label).

P330

Rinse mouth.

P363

Wash contaminated clothing before reuse.

P405

Store locked up.

P501

Dispose of contents/container to the specifications of local, regional,

national, and international regulations.

## **SECTION 3: Composition/information on ingredients**

#### 3.2 **Mixtures**

## **Hazardous components**

1. 2-Butoxyethanol

1 - 10 % (weight)

EC no.

Concentration

203-905-0

CAS no.

111-76-2

Index no.

603-014-00-0

2. Potassium Hydroxide

Concentration

1 - 10 % (weight)

EC no.

215-181-3

CAS no.

1310-58-3

Index no.

019-002-00-8

3. Dodecylbenzenesulfonic acid, sodium salt

Concentration

1 - 10 % (weight)

CAS no.

68081-81-2

#### 4. Sodium xylenesulfonate

Concentration CAS no.

0.1 - 1 % (weight) 1300-72-7

## **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

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.

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

Provide general support measures and treat symptomatically. Chemical burns: flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call for immediate medical attention. Continue flushing during transportation to medical care. Keep victim warm. Keep victim under observation. Symptoms my be delayed. 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**

#### 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

**Reactivity:** Stable under recommended storage conditions. May be corrosive to metals. Increased risk of fire or explosion.

#### 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: Sodium oxide(s), silicon oxide(s).

#### **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 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 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.

**6.2** Environmental precautions

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.

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.

## **SECTION 7: Handling and storage**

7.1 Precautions for safe handling

**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.

**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.

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 and alkalis, or oxidizing agents.

#### Specific end use(s)

Cleaner

## **SECTION 8: Exposure controls/personal protection**

#### **B.1** Control parameters

#### 1. 2-Butoxyethanol (CAS: 111-76-2 EC: 203-905-0)

PEL-C (Inhalation): 20 ppm, 97 mg/m3 TLV® (Inhalation): 20 ppm; USA (ACGIH)

TWA (Inhalation): 20 ppm; USA (ACGIH)

PEL-C (Inhalation): 20 ppm (Cal/OSHA)

REL-C (Inhalation): 5 ppm (NIOSH)

TWA (Inhalation): 5 ppm, 24 mg/m3 (NIOSH)

PEL-C (Inhalation): 50 ppm (US/OSHA)

PEL-C (Inhalation): 240 mg/3 (US/OSHA)

TWA (Inhalation): 50 ppm, 240 mg/m3 (US/OSHA)

#### 2. Potassium Hydroxide (CAS: 1310-58-3 EC: 215-181-3)

PEL-C (Inhalation): 2 mg/m3; USA (ACGIH)

PEL-C (Inhalation): 2 mg/m3; USA (Cal/OSHA)

PEL-C (Inhalation): 2 mg/m3; USA (NIOSH)

#### 3. 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

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

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

#### 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)

#### **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. 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 Appearance

Color Odor

Odor threshold

Melting point/freezing point

Boiling point or initial boiling point and boiling range

Flammability

Lower and upper explosion limit/flammability limit

Flash point

Auto-ignition temperature

Liquid

Clear liquid

Orange

Citrus

N/D

32°F (0°C) estimated

212°F (100°C) estimated

N/D

N/D

None through boiling

N/D

Decomposition temperature

рΗ

Kinematic viscosity

Solubility

Partition coefficient n-octanol/water (log value)

Vapor pressure

Evaporation rate

Density and/or relative density

Relative vapor density

N/D

12-14 N/D

Completely soluble in water

N/D

17.5 mmHg at 20 °C (Water)

Same as water

1.03-1.05

> 1 (Air=1)

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Reacts strongly with strong acids. This product may react with oxidizing agents.

#### 10.2 Chemical stability

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

None under normal use conditions.

#### 10.4 Conditions to avoid

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

#### 10.5 Incompatible materials

Strong acids and alkalis, or oxidizing agents.

#### 10.6 Hazardous decomposition products

Carbon oxides, potassium oxides, and fumes.

## **SECTION 11: Toxicological information**

#### Information on toxicological effects

#### **Acute 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

#### Dodecylbenzene sodium sulfonate

LD50 Oral - Rat - 1090 mg/kg

#### Potassium Hydroxide

LD50 Oral - Rat - 333 mg/kg

#### Sodium xylenesulfonate

LD50 Oral - Rat - male and female - >=7,200 mg/kg

LD50 Oral - Rabbit - male and female - > 2,000 mg/kg

#### 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 competent 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.

### Specific target organ toxicity (STOT) - single exposure

None known.

#### Specific target organ toxicity (STOT) - repeated exposure

None known.

#### **Aspiration hazard**

The ATE (gas inhalation) of the mixture is: 45000 ppmV.

The ATE (oral) of the mixture is: 1666.67 mg/kg bw.

#### Additional information

Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.

**Medical Conditions 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.

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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

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

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

#### Persistence and degradability

No information is available.

#### Bioaccumulative potential

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 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 a hazardous waste according to federal regulations (U.S. EPA 40 CFR 261). Dispose of contents/container in accordance with local, regional, national, and international regulations.

#### 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: UN3266

Class: 8

Packing Group: I

Proper Shipping Name: Corrosive liquid, basic, inorganic, n.o.s.

#### **IMDG**

UN Number: UN3266

Class: 8

Packing Group: I EMS Number: N/A

Proper Shipping Name: Corrosive liquid, basic, inorganic, n.o.s.

#### **IATA**

UN Number: UN3266

Class: 8

Packing Group: I

Proper Shipping Name: Corrosive liquid, basic, inorganic, n.o.s.

## **SECTION 15: Regulatory information**

## 15.1 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.

#### **Massachusetts Right To Know Components**

Ethylene glycol monobutyl ether

CAS: 111-76-2

Potassium hydroxide CAS: 1310-58-3

## **New Jersey Right To Know Components**

Ethylene glycol monobutyl ether

CAS: 111-76-2

Potassium hydroxide CAS: 1310-58-3

Sodium xylenesulponate

CAS: 1300-72-7

Common name: 2-BUTOXY ETHANOL

CAS number: 111-76-2

Common name: POTASSIUM HYDROXIDE

CAS number: 1310-58-3

#### Pennsylvania Right To Know Components

Ethylene glycol monobutyl ether

CAS: 111-76-2

Potassium hydroxide CAS: 1310-58-3

Sodium xylenesulponate

CAS: 1300-72-7

Chemical name: ETHANOL, 2-BUTOXY-

CAS number: 111-76-2

Chemical name: POTASSIUM HYDROXIDE (K(OH))

CAS number: 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**

The following components are subject to reporting levels established by SARA Title III, Section 313: Ethylene glycol monobutyl ether

CAS: 111-76-2

#### **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: Dodecylbenzenesulfonic acid, sodium salt

CAS number: 68081-81-2

Chemical name: Sodium xylenesulfonate

CAS number: 1300-72-7

#### **HMIS Rating**

Quad Power Liquid	
HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	1
PERSONAL PROTECTION	В

#### **NFPA Rating**



#### **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