According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 10.25.2017

Quat Spike

SECTION 1: Identification

Product identifier

Product name: Quat Spike Product code: QA5115SS

Recommended use of the product and restriction on use

Relevant identified uses: Waste water treatment Uses advised against: Not determined or not applicable. Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer: United States AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 1-717-632-1291

Emergency telephone number: United States ChemTel Inc +1(800)255-3924 +1(813)248-0585

SECTION 2: Hazard(s) identification

GHS classification:

Eye irritation, category 2A Skin irritation, category 2 Carcinogenicity, category 1B Chronic aquatic hazard, category 3

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H319 Causes serious eye irritation

- H315 Causes skin irritation
- H350 May cause cancer

H412 Harmful to aquatic life with long lasting effects

Precautionary statements:

P264 Wash skin thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection

- P201 Obtain special instructions before use
- P202 Do not handle until all safety precautions have been read and understood

P273 Avoid release to the environment

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 10.25.2017

Quat Spike

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

P321 Specific treatment (see supplemental first aid instructions on this label).

P362 Take off contaminated clothing and wash before reuse

P302+P352 If on skin: Wash with soap and water

P332+P313 If skin irritation occurs: Get medical advice/attention

P308+P313 If exposed or concerned: Get medical advice/attention

P405 Store locked up

P501 Dispose of contents and container as instructed in Section 13

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 7732-18-5	Water	98
CAS number: 64-17-5	Ethanol	0.2
CAS number: 68424-85-1	Alkyl dimethyl benzyl ammonium chloride	1

Additional Information: None

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway Get medical advice/attention if you feel unwell

After skin contact:

Rinse affected area with soap and water If symptoms develop or persist, seek medical attention Wash affected area with soap and water Seek medical attention if symptoms develop or persist

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes Remove contact lenses, if present and easy to do Continue rinsing Get medical advice/attention Remove contact lens(es) if able to do so during rinsing Seek medical attention if irritation persists or if concerned

After swallowing:

Rinse mouth and then drink plenty of water Do not induce vomiting Get medical advice/attention if you feel unwell

Most important symptoms and effects, both acute and delayed

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 10.25.2017

Quat Spike

Acute symptoms and effects:

Not determined or not applicable.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Not determined or not applicable.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing Refer to Section 8 Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:

Heating causes a rise in pressure, risk of bursting and combustion Shut off sources of ignition Carbon monoxide and carbon dioxide may form upon combustion

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation Ensure air handling systems are operational Wear protective eye wear, gloves and clothing

Environmental precautions:

Should not be released into the environment

Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders)

Dispose of contents / container in accordance with local regulations

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances. Avoid breathing mist or vapor. Page 3 of 9

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 10.25.2017

Quat Spike

Use only with adequate ventilation.

Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area. Store away from foodstuffs.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Ethanol	64-17-5	ACGIH TLV TWA 1,000 ppm
	Ethanol	64-17-5	ACGIH TLV STEL 1,000 ppm
United States (OSHA)	Ethanol	64-17-5	OSHA PEL TWA 1,000 ppm
	Ethanol	64-17-5	OSHA PEL TWA 1,900 mg/m ³
NIOSH	Ethanol	64-17-5	NIOSH REL TWA 1,000 ppm
	Ethanol	64-17-5	NIOSH REL TWA 1,900 mg/m ³

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

General hygienic measures:

Wash hands before breaks and at the end of work. Avoid contact with skin, eyes and clothing. Perform routine housekeeping. Wash contaminated clothing before reusing.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Clear, colorless liquid
Odor	Odorless
Odor threshold	Not determined or not available.
рН	Not determined or not available.
Melting point/freezing point	Approx. 0 °C

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 10.25.2017

Page 5 of 9

Quat Spike

	1 10000
Initial boiling point/range	Approx. 100°C
Flash point (closed cup)	Not determined or not available.
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Non-flammable
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	1 g/cm³
Relative density	1
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

None known.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Route	Result
Alkyl dimethyl benzyl ammonium chloride	oral	LD50 - Rat: 426 mg/kg

Skin corrosion/irritation

Assessment: Causes skin irritation

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 10.25.2017

Quat Spike

Page 6 of 9

Product data: No data available.

Substance data:

Name	Result
Alkyl dimethyl benzyl ammonium chloride	Causes severe skin burns and eye damage.

Serious eye damage/irritation

Assessment: Causes serious eye irritation

Product data: No data available.

Substance data:

Name	Result
Alkyl dimethyl benzyl ammonium chloride	Causes serious eye damage.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Carcinogenicity

Assessment: May cause cancer

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC):

Name	Classification
Ethanol	Group 1 - Carcinogenic to humans

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 10.25.2017

Quat Spike

Symptoms related to the physical, chemical and toxicological characteristics: No data available. Other information: No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met. Product data: No data available. Substance data: No data available. Chronic (long-term) toxicity Product data: No data available. Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	Not Regulated
UN proper shipping name	Not Regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	Not Regulated
UN proper shipping name	Not Regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 10.25.2017

Page 8 of 9

Qua	nt S	pike
-----	------	------

-	
UN number	Not Regulated
UN proper shipping name	Not Regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

64-17-5	Ethanol	Listed
68424-85-1	Alkyl dimethyl benzyl ammonium chloride	Listed
7732-18-5	Water	Listed

Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

SARA Section 311/312 hazards:

Acute	Chronic	Fire	Pressure	Reactive
Yes	Yes	No	No	No

SARA Section 302 extremely hazardous substances: Not determined.

SARA Section 313 toxic chemicals:

68424-85-1	Alkyl dimethyl benzyl ammonium chloride	Not
		Listed

CERCLA: Not determined.

RCRA: Not determined.

Section 112(r) of the Clean Air Act (CAA): Not determined.

Massachusetts Right to Know:

68424-85-1	Alkyl dimethyl benzyl ammonium chloride	Not Listed
64-17-5	Ethanol	Listed

New Jersey Right to Know:

68424-85-1	Alkyl dimethyl benzyl ammonium chloride	Not
		Listed

New York Right to Know:

	68424-85-1	, , ,	Not Listed			
	64-17-5	Ethanol	Listed			
Per	Pennsylvania Right to Know:					

64-17-5 Ethanol Listed

California Proposition 65: None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 10.25.2017

Quat Spike

and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 3-0-0

HMIS: 3-0-0 Initial preparation date: 10.25.2017

End of Safety Data Sheet