Printing date 12/07/2017 Reviewed on 12/07/2017

### 1 Identification

· Product identifier

· Trade name: Phenol Red 0.1%

in 20% Ethanol

· Article number: SPX499

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier: Aqua Solutions, Inc. 6913 Highway 225 DEER PARK, TX 77536 USA

800-256-2586

· Information department:

Technical Coordinator

Sherman Nelson sherman@aquasolutions.org

· Emergency telephone number:

Chemtrec: 800-424-9300 Canutec: 613-996-6666



### 2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS02

- · Signal word Warning
- · Hazard statements

Flammable liquid and vapor.

· Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

*Use explosion-proof electrical/ventilating/lighting/equipment.* 

Use only non-sparking tools.

Take precautionary measures against static discharge.

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

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

*In case of fire: Use for extinction: CO2, powder or water spray.* 

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0 Fire = 3Reactivity = 0

· HMIS-ratings (scale 0 - 4)



- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable. · **vPvB**: Not applicable.

### 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

| · Dangerous components:                        |                         |         |  |
|--|-------------------------|---------|--|
| CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof |                         |         |  |
| · Table of Nonhazardous Ingredients            |                         |         |  |
| CAS: 34487-61-1                                | Phenol Red, Sodium Salt | 0.104%  |  |
| CAS: 7732-18-5                                 | Water                   | 83.432% |  |

### 4 First-aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

### 5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· Special hazards arising from the substance or mixture No further relevant information available.

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- · Advice for firefighters
- · Protective equipment: No special measures required.

### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

| · PAC-1:        |                                   |            |
|-----------------|-----------------------------------|------------|
| CAS: 64-17-5    | Ethyl Alcohol, Absolute 200 Proof | 1,800 ppm  |
| CAS: 34487-61-1 | Phenol Red, Sodium Salt           | 12 mg/m³   |
| · PAC-2:        |                                   |            |
| CAS: 64-17-5    | Ethyl Alcohol, Absolute 200 Proof | 3300* ppm  |
| CAS: 34487-61-1 | Phenol Red, Sodium Salt           | 130 mg/m³  |
| · PAC-3:        |                                   |            |
| CAS: 64-17-5    | Ethyl Alcohol, Absolute 200 Proof | 15000* ppm |
| CAS: 34487-61-1 | Phenol Red, Sodium Salt           | 790 mg/m³  |

### 7 Handling and storage

- · Handling:
- · Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

### 8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

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#### · Control parameters

· Components with limit values that require monitoring at the workplace:

## CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof

PEL Long-term value: 1900 mg/m<sup>3</sup>, 1000 ppm REL Long-term value: 1900 mg/m<sup>3</sup>, 1000 ppm TLV Short-term value: 1880 mg/m³, 1000 ppm

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures: Wash hands before breaks and at the end of work.
- · Breathing equipment: Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Not determined.

· Eye protection:



Tightly sealed goggles

· **Body protection:** Protective work clothing

#### 9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

· pH-value:

Form: Liquid

Color: Clear red-yellow · Odor: Alcohol-like · Odor threshold: Not determined.

· Change in condition

Melting point/Melting range: Undetermined. Boiling point/Boiling range: 78.3 °C (172.9 °F)

36 °C (96.8 °F) · Flash point:

Not applicable. · Flammability (solid, gaseous):

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|                                       | (Contd. of page   |
|---------------------------------------|---|
| Ignition temperature:                 | 425 °C (797 °F)   |
| Decomposition temperature:            | Not determined.   |
| Auto igniting:                        | Product is not selfigniting.  |
| Danger of explosion:                  | Product is not explosive. However, formation of explosive air/vape mixtures are possible. |
| Explosion limits:                     |   |
| Lower:                                | 3.5 Vol %   |
| Upper:                                | 19 Vol %  |
| Vapor pressure at 20 °C (68 °F):      | 59 hPa (44.3 mm Hg)   |
| Density:                              | Not determined.   |
| Relative density                      | Not determined.   |
| Vapor density                         | Not determined.   |
| Evaporation rate                      | Not determined.   |
| Solubility in / Miscibility with      |   |
| Water:                                | Fully miscible.   |
| Partition coefficient (n-octanol/wate | e <b>r</b> ): Not determined.   |
| Viscosity:                            |   |
| Dynamic:                              | Not determined.   |
| Kinematic:                            | Not determined.   |
| Solvent content:                      |   |
| Organic solvents:                     | 16.5 %  |
| Water:                                | 83.4 %  |
| VOC content:                          | 16.46 %   |
|                                       | 164.6 g/l / 1.37 lb/gl  |
| Solids content:                       | 16.6 %  |
| Other information                     | No further relevant information available.  |

# 10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

## 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.

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- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof

1

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

## 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

## 13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

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|----|-------|---------|--------|-----|
|    |       |         |        |     |

- · UN-Number
- · DOT, IMDG, IATA

UN1993

- · UN proper shipping name
- **DOT** Flammable liquids, n.o.s. (Ethanol)
- · IMDG, IATA FLAMMABLE LIQUID, N.O.S. (ETHANOL)

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Trade name: Phenol Red 0.1% in 20% Ethanol

|  | (Contd. of pa              |
|--|----------------------------|
| · Transport hazard class(es)           |                            |
| $\cdot$ <b>DOT</b>                     |                            |
| RAMMEL LOUD                            |                            |
| · Class                                | 3 Flammable liquids        |
| · Label                                | 3                          |
| · IMDG, IATA                           |                            |
| Class                                  | 2 Elamoskia lianida        |
| · Class<br>· Label                     | 3 Flammable liquids<br>3   |
|  | 3                          |
| · Packing group<br>· DOT, IMDG, IATA   | III                        |
| · Environmental hazards:               | Not applicable.            |
| · Special precautions for user         | Warning: Flammable liquids |
| · Danger code (Kemler):                | 30                         |
| · EMS Number:                          | F-E, <u>S-E</u>            |
| · Stowage Category                     | A                          |
| · Transport in bulk according to Annex | II of                      |
| MARPOL73/78 and the IBC Code           | Not applicable.            |

· Transport/Additional information:

 $\cdot$  **DOT** 

• Quantity limitations On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L

 $\cdot$  IMDG

Limited quantities (LQ)
 Excepted quantities (EQ)

5L
Code

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· UN ''Model Regulation'': UN 1993 FLAMMABLE LIQUIDS, N.O.S. (ETHANOL), 3, III

## 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

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#### · TSCA (Toxic Substances Control Act):

Ethyl Alcohol, Absolute 200 Proof

Phenol Red, Sodium Salt

Water

- · TSCA new (21st Century Act) (Substances not listed)
- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof

A3

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS02

- · Signal word Warning
- · Hazard statements

Flammable liquid and vapor.

· Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

*Use explosion-proof electrical/ventilating/lighting/equipment.* 

Use only non-sparking tools.

Take precautionary measures against static discharge.

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

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

*In case of fire: Use for extinction: CO2, powder or water spray.* 

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environment protection department.
- · Contact:
- · Date of preparation / last revision

Revision 0.0, 12-07-2017: Creation date for SDS. DL 12/07/2017 / -

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International

Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)

HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

Flam. Liq. 3: Flammable liquids - Category 3

-US