Printing date 12/29/2017

Reviewed on 12/29/2017

1 Identification

- · Product identifier
- Trade name: Oxalic Acid 10% w/v Soln., with Sodium Propionate
- · Article number: SO-072
- 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



Skin Corr. 1C H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

· Label elements

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



- · Signal word Danger
- · Hazard-determining components of labeling:
- Oxalic Acid Dihydrate
- · Hazard statements
- Causes severe skin burns and eye damage.
- · Precautionary statements
- Do not breathe dusts or mists.

Wash thoroughly after handling.

- Wear protective gloves/protective clothing/eye protection/face protection.
- If swallowed: Rinse mouth. Do NOT induce vomiting.
- If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

Specific treatment (see on this label).

(Contd. on page 2)

US

Printing date 12/29/2017

Reviewed on 12/29/2017

Trade name: Oxalic Acid 10% w/v Soln., with Sodium Propionate

(Contd. of page 1) Wash contaminated clothing before reuse. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations. · Classification system: · NFPA ratings (scale 0 - 4) Health = 3Fire = 0Reactivity = 0· HMIS-ratings (scale 0 - 4) HEALTH 3 Health = 3 FIRE 0 Fire = 0**REACTIVITY O** Reactivity = 0· 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 comp | ponents: | |
|-------------------|-----------------------|---------|
| CAS: 6153-56-6 | Oxalic Acid Dihydrate | 9.62% |
| • Table of Nonhaz | ardous Ingredients | |
| CAS: 137-40-6 | Sodium Propionate | 0.0962% |
| CAS: 7732-18-5 | Water | 90.284% |

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. Then consult a doctor.
- · 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: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.

(Contd. on page 3)

Printing date 12/29/2017

Reviewed on 12/29/2017

(Contd. of page 2)

Soln., with Sodium Propionate

· Advice for firefighters

· Protective equipment: No special measures required.

6 Accidental release measures

| | tions, protective equipment and emergency procedures | |
|---------------------|--|-------------------------|
| | equipment. Keep unprotected persons away. | |
| • Environmental p | | |
| Dilute with plent | | |
| | enter sewers/ surface or ground water. | |
| | terial for containment and cleaning up: | |
| 1 | id-binding material (sand, diatomite, acid binders, universal binders, sawdust). | |
| Use neutralizing | | |
| | nated material as waste according to item 13. | |
| · Reference to oth | er sections | |
| See Section 7 for | information on safe handling. | |
| See Section 8 for | information on personal protection equipment. | |
| See Section 13 fo | or disposal information. | |
| · Protective Action | n Criteria for Chemicals | |
| · PAC-1: | | |
| CAS: 6153-56-6 | Oxalic Acid Dihydrate | $2 mg/m^3$ |
| CAS: 137-40-6 | Sodium Propionate | 15 mg/m³ |
| · PAC-2: | | |
| CAS: 6153-56-6 | Oxalic Acid Dihydrate | 83 mg/m ³ |
| CAS: 137-40-6 | Sodium Propionate | 170 mg/m ³ |
| · PAC-3: | | |
| CAS: 6153-56-6 | Oxalic Acid Dihydrate | 500 mg/m ³ |
| CAS: 137-40-6 | Sodium Propionate | 1,000 mg/m ³ |

7 Handling and storage

· Handling:

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

(Contd. on page 4)

US –

Printing date 12/29/2017

Reviewed on 12/29/2017

Trade name: Oxalic Acid 10% w/v

Soln., with Sodium Propionate

(Contd. of page 3)

· Control parameters

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

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

• Additional information: The lists that were valid during the creation were used as basis.

· Exposure controls

- · Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes.

- Avoid contact with the eyes and skin.
- Breathing equipment: Not required.
- · Protection of hands:



Protective gloves

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 \cdot *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.

· 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: Form: Liquid Color: Clear **Odorless** · Odor: · Odor threshold: Not determined. · pH-value: Not determined. (Contd. on page 5) US

Printing date 12/29/2017

Reviewed on 12/29/2017

Trade name: Oxalic Acid 10% w/v Soln., with Sodium Propionate

| | | (Contd. of page 4 |
|--|---|-------------------|
| Change in condition Melting point/Melting range: Boiling point/Boiling range: | Undetermined. 100 °C (212 °F) | |
| · Flash point: | Not applicable. | |
| · Flammability (solid, gaseous): | Not applicable. | |
| · Ignition temperature: | | |
| Decomposition temperature: | Not determined. | |
| · Auto igniting: | Product is not selfigniting. | |
| · Danger of explosion: | Product does not present an explosion hazard. | |
| · Explosion limits: Lower: Upper: | Not determined. Not determined. | |
| · Vapor pressure at 20 °C (68 °F): | 23 hPa (17.3 mm Hg) | |
| Density at 20 °C (68 °F): Relative density Vapor density Evaporation rate | 1.0395 g/cm ³ (8.67463 lbs/gal) Not determined. Not determined. Not determined. | |
| • Solubility in / Miscibility with Water: | Fully miscible. | |
| · Partition coefficient (n-octanol/water | r): Not determined. | |
| · Viscosity: Dynamic: Kinematic: | Not determined. Not determined. | |
| • Solvent content: Water: VOC content: | 90.3 % 0.00 % 0.0 g/l / 0.00 lb/gl | |
| Solids content: • Other information | 9.7 % 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.

(Contd. on page 6)

US

Printing date 12/29/2017

Reviewed on 12/29/2017

Trade name: Oxalic Acid 10% w/v

Soln., with Sodium Propionate

(Contd. of page 5)

11 Toxicological information

· Information on toxicological effects

• Acute toxicity:

· LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Oral LD50 5,198 mg/kg

Dermal LD50 11,435 mg/kg

CAS: 6153-56-6 Oxalic Acid Dihydrate

Oral LD50 500 mg/kg (ATE)

Dermal LD50 1,100 mg/kg (ATE)

· Primary irritant effect:

• on the skin: No irritant effect.

• on the eye: Strong irritant with the danger of severe eye injury.

· Sensitization: No sensitizing effects known.

• Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· 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. Must not reach bodies of water or drainage ditch undiluted or unneutralized.

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

(Contd. on page 7)

Printing date 12/29/2017

Reviewed on 12/29/2017

Trade name: Oxalic Acid 10% w/v

Soln., with Sodium Propionate

(Contd. of page 6)

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.

| UN-Number | |
|--------------------------------------|--|
| DOT, IMDG, IATA | UN3265 |
| UN proper shipping name | |
| DOT | Corrosive liquid, acidic, organic, n.o.s. (Oxalic Acid Dihydrate) |
| IMDG, IATA | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Oxalic Ad Dihydrate) |
| Transport hazard class(es) | |
| DOT | |
| ~ | |
| | |
| CORROSIVE | |
| 8 | |
| Class | 8 Corrosive substances |
| Label | 8 |
| IMDG, IATA | |
| 8 | |
| Class | 8 Corrosive substances |
| Label | 8 |
| Packing group | |
| DOT, IMDG, IATA | III |
| Environmental hazards: | Not applicable. |
| Special precautions for user | Warning: Corrosive substances |
| Danger code (Kemler): | 88 |
| EMS Number: | F-A,S-B |
| Segregation groups | Acids |
| Transport in bulk according to Annex | II of |
| | Not applicable. |

Printing date 12/29/2017

Reviewed on 12/29/2017

Trade name: Oxalic Acid 10% w/v Soln., with Sodium Propionate

(Contd. of page 7)

· UN "Model Regulation":

UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (OXALIC ACID DIHYDRATE), 8, III

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot Sara

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

Sodium Propionate

Water

· TSCA new (21st Century Act) (Substances not listed)

CAS: 6153-56-6 Oxalic Acid Dihydrate

· 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:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· 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*



· Signal word Danger

• Hazard-determining components of labeling: Oxalic Acid Dihydrate

(Contd. on page 9)

US

Printing date 12/29/2017

Reviewed on 12/29/2017

Trade name: Oxalic Acid 10% w/v Soln., with Sodium Propionate

(Contd. of page 8)

· Hazard statements Causes severe skin burns and eye damage. · Precautionary statements Do not breathe dusts or mists. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Specific treatment (see on this label). Wash contaminated clothing before reuse. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations. · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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 12-29-2017: review SDS for accuracy. STN Revision 0.0, 02-19-2016: Creation date for SDS. STN 12/29/2017 / -· 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) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent 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 Skin Corr. 1C: Skin corrosion/irritation - Category 1C Eye Dam. 1: Serious eye damage/eye irritation - Category 1