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1 Identification

- · Product identifier
- Trade name: Gardner Color Standard #3 ASTM D 1544-58T
- Article number: 3913
- · 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 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



GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS05 Corrosion

Skin Corr. 1A 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: Potassium Platinum Chloride
- · Hazard statements Causes severe skin burns and eye damage.
- May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- · Precautionary statements Do not breathe dusts or mists.

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| | (Contd. of page 1) |
|---|--------------------|
| Wash thoroughly after handling. | |
| Wear protective gloves/protective clothing/eye protection/face protection. | |
| [In case of inadequate ventilation] wear respiratory 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 | • |
| <i>IF INHALED: Remove person to fresh air and keep comfortable for breathing.</i> | and same to do |
| If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present Continue rinsing. | ana easy to ao. |
| Immediately call a poison center/doctor. | |
| Specific treatment (see on this label). | |
| If experiencing respiratory symptoms: Call a poison center/doctor. | |
| Wash contaminated clothing before reuse. | |
| Store locked up. | |
| Dispose of contents/container in accordance with local/regional/national/international regulation | 1 S |
| · Classification system: | |
| · NFPA ratings (scale 0 - 4) | |
| $\begin{array}{c} \textbf{Health} = 3\\ Fire = 0\\ Reactivity = 0 \end{array}$ | |
| $HMIS-ratings (scale 0 - 4)$ $HEALTH \qquad 2 \qquad Health = 2$ | |
| FIRE \bigcirc FIRE \bigcirc Fire \bigcirc Reactivity \bigcirc | |
| · Other hazards | |
| • Results of PBT and vPvB assessment • PBT: Not applicable. | |
| • $\mathbf{PB1}$: Not applicable. • \mathbf{vPvB} : Not applicable. | |
| | |
| | |
| 3 Composition/information on ingredients | |
| • Chemical characterization: Mixtures • Description: Mixture of the substances listed below with nonhazardous additions. | |
| · Dangerous components: | |
| CAS: 16921-30-5 Potassium Platinum Chloride | 0.133% |
| Crist 10721 50 5 1 Oussiant Lannant Chiotrac | 0.15570 |

• Table of Nonhazardous Ingredients

 CAS: 7647-01-0
 Hydrochloric Acid
 0.0948%

 CAS: 7732-18-5
 Water
 99.772%

4 First-aid measures

· Description of first aid measures

• General information: Immediately remove any clothing soiled by the product.

- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: Drink copious amounts of water and provide fresh air. Immediately call a doctor.

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- Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- \cdot 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 During heating or in case of fire poisonous gases are produced.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
 Mount respiratory protective device.
 Wear protective equipment. Keep unprotected persons away.
 Environmental precautions: Dilute with plenty of water.
 Methods and material for containment and cleaning up:
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 Use neutralizing agent.
 Dispose contaminated material as waste according to item 13.
 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: 7647-01-0 | Hydrochloric Acid | 1.8 ppm |
| · PAC-2: | | |
| CAS: 7647-01-0 | Hydrochloric Acid | 22 ppm |
| · PAC-3: | | |
| CAS: 7647-01-0 | Hydrochloric Acid | 100 ppm |

7 Handling and storage

· Handling:

- Precautions for safe handling
- Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of aerosols.

· Information about protection against explosions and fires: Keep respiratory protective device available.

· 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.

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- 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.

· Control parameters

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

CAS: 16921-30-5 Potassium Platinum Chloride

- PEL Long-term value: 0.002 mg/m³ as Pt REL Long-term value: 0.002 mg/m³ as Pt
- TLV Long-term value: 0.002 mg/m³ as Pt

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

· Exposure controls

- · Personal protective equipment:
- \cdot 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:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

• 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

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· Body protection: Protective work clothing

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

| Information on basis physical and | abamiaal avanautias | |
|--|---|--|
| Information on basic physical and of General Information | cnemicai properiles | |
| · Appearance: | | |
| Form: | Liquid | |
| Color: | Yellow | |
| · Odor: | Odorless | |
| • Odor threshold: | Not determined. | |
| · pH-value: | Not determined. | |
| · Change in condition | | |
| Melting point/Melting range: | Undetermined. | |
| Boiling point/Boiling range: | 100 °C (212 °F) | |
| · Flash point: | Not applicable. | |
| · Flammability (solid, gaseous): | Not applicable. | |
| • Decomposition temperature: | Not determined. | |
| · Auto igniting: | Product is not selfigniting. | |
| • Danger of explosion: | Product does not present an explosion hazard. | |
| · Explosion limits: | | |
| Lower: | Not determined. | |
| Upper: | Not determined. | |
| · Vapor pressure at 20 °C (68 °F): | 23 hPa (17.3 mm Hg) | |
| · Density at 20 °C (68 °F): | 1.00107 g/cm ³ (8.35393 lbs/gal) | |
| · Relative density | Not determined. | |
| · Vapor density | Not determined. | |
| · Evaporation rate | Not determined. | |
| · Solubility in / Miscibility with | | |
| Water: | Fully miscible. | |
| · Partition coefficient (n-octanol/wat | er): Not determined. | |
| · Viscosity: | | |
| Dynamic: | Not determined. | |
| Kinematic: | Not determined. | |
| · Solvent content: | | |
| Water: | 99.8 % | |
| VOC content: | 0.00 % | |
| | 0.0 g/l / 0.00 lb/gal | |
| Solids content: | 0.1 % | |
| • Other information | No further relevant information available. | |

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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:

· LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Oral LD50 75,245 mg/kg

· Primary irritant effect:

• on the skin: Strong caustic effect on skin and mucous membranes.

- \cdot on the eye:
- Strong caustic effect.

Strong irritant with the danger of severe eye injury.

· Sensitization: Sensitization possible through inhalation.

· Additional toxicological information:

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

- Corrosive
- Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· 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.

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· Additional ecological information:

• General notes:

Not hazardous for water.

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.

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.

14 Transport information

| · UN-Number | | |
|---|-----------------|--|
| · DOT, ADN, IMDG, IATA | Not regulated | |
| · UN proper shipping name · DOT, ADN, IMDG, IATA | Not regulated | |
| · Transport hazard class(es) | | |
| · DOT, ADN, IMDG, IATA | | |
| · Class | Not regulated | |
| · Packing group | | |
| · DOT, IMDG, IATA | Not regulated | |
| · Environmental hazards: | | |
| • Marine pollutant: | No | |
| · Special precautions for user | Not applicable. | |
| · Transport in bulk according to Annex | II of | |
| MARPOL73/78 and the IBC Code | Not applicable. | |
| · UN "Model Regulation": | Not regulated | |

15 Regulatory information

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

 \cdot 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): | |
| Potassium Platinum Chloride | ACTIVE |
| Hydrochloric Acid | ACTIVE |
| Water | ACTIVE |
| · Hazardous Air Pollutants | |

CAS: 7647-01-0 Hydrochloric Acid

· 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:

Potassium Platinum Chloride

· Hazard statements

Causes severe skin burns and eye damage.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

· Precautionary statements

Do not breathe dusts or mists. Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection. [In case of inadequate ventilation] wear respiratory 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.

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Immediately call a poison center/doctor. Specific treatment (see on this label). If experiencing respiratory symptoms: Call a poison center/doctor. 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

Revision 0.1, 06-11-2018 updated density results based on spreadsheet. STN 07/23/2019 / -• **Abbreviations and acronyms:** 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. 1A: Skin corrosion/irritation - Category 1A Eye Dam. 1: Serious eye damage/eye irritation - Category 1 Resp. Sens. 1: Respiratory sensitisation - Category 1