Printing date 07/23/2019

Reviewed on 07/23/2019

1 Identification

- · Product identifier
- · Trade name: Gardner Color Standard #1 ASTM D 1544-58T
- Article number: 3911
- · 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.



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 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.

(Contd. on page 2)

US

Printing date 07/23/2019

Reviewed on 07/23/2019

Trade name: Gardner Color Standard #1 ASTM D 1544-58T

	ontd. of page 1)
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	l easy to do.
Continue rinsing.	
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.	
· Classification system:	
· NFPA ratings (scale 0 - 4)	
Health = 3	
Fire = 0	
$\frac{3}{Reactivity} = 0$	
V V Reactivity = 0	
· HMIS-ratings (scale 0 - 4)	
HEALTH 2 $Health = 2$	
FIRE 0 Fire = 0	
$\begin{array}{c} \text{REACTIVITY} \\ \hline \end{array} \\ \hline \\ \\ \hline \end{array} \\ \hline \\ \\ \hline \end{array} \\ \hline \end{array} \\ \hline \\ \\ \hline \end{array} \\ \hline \end{array} \\ \hline \\ \\ \hline \end{array} \\ $ \\ \hline \\ \\ \hline \end{array} \\ \\ \hline \end{array} \\ \\ \\ \hline \end{array} \\ \\ \\ \\ \hline \end{array} \\ \\ \\ \\	
Reactivity = 0	
· Other hazards	
· Results of PBT and vPvB assessment	
• <i>PBT</i> : 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: Not Applicable

• Table of Nonhaza	· Table of Nonhazardous Ingredients	
CAS: 7647-01-0	Hydrochloric Acid	0.0949%
CAS: 16921-30-5	Potassium Platinum Chloride	0.055%
CAS: 7732-18-5	Water	99.85%

4 First-aid measures

- \cdot 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.
- Information for doctor:

• Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 3)

Printing date 07/23/2019

Reviewed on 07/23/2019

Trade name: Gardner Color Standard #1 ASTM D 1544-58T

• *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

· FAC-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:

- \cdot 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.
- $\cdot \textit{Further information about storage conditions: Keep receptacle tightly sealed.}$

(Contd. on page 4)

US

(Contd. of page 2)

Printing date 07/23/2019

Reviewed on 07/23/2019

Trade name: Gardner Color Standard #1 ASTM D 1544-58T

(Contd. of page 3)

• 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:

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:

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 • 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

(Contd. on page 5)

Printing date 07/23/2019

Reviewed on 07/23/2019

Trade name: Gardner Color Standard #1 ASTM D 1544-58T

(Contd. of page 4)

Information on basic physical and c	hemical properties	
General Information	nemicui properties	
Appearance:		
Form:	Liquid	
Color:	Yellow	
Odor:	Odorless	
Odor threshold:	Not determined.	
pH-value at 20 °C (68 °F):	<2	
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):	1.00052 g/cm³ (8.34934 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/wate	r): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Water:	99.9 %	
VOC content:	0.00~%	
	0.0 g/l / 0.00 lb/gal	
Solids content:	0.1 %	
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.

(Contd. on page 6) US

Printing date 07/23/2019

Reviewed on 07/23/2019

Trade name: Gardner Color Standard #1 ASTM D 1544-58T

(Contd. of page 5)

- · 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: 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.
- · Additional ecological information:
- General notes:

Not hazardous for water.

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

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

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

· vPvB: Not applicable.

(Contd. on page 7)

US

Printing date 07/23/2019

Reviewed on 07/23/2019

Trade name: Gardner Color Standard #1 ASTM D 1544-58T

(Contd. of page 6)

• 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.

· 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	
\cdot 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

None of the ingredients is listed.	
Section 313 (Specific toxic chemical listings):	
None of the ingredients is listed.	
TSCA (Toxic Substances Control Act):	
Hydrochloric Acid	ACTIV
Potassium Platinum Chloride	ACTIV
Water	ACTIV
	(Contd. on page

Printing date 07/23/2019

Reviewed on 07/23/2019

Trade name: Gardner Color Standard #1 ASTM D 1544-58T

(Contd. of page 7)

· Hazardous Air Pollutants

CAS: 7647-01-0 Hydrochloric Acid

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

 \cdot 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 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. 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.

(Contd. on page 9)

- US

Printing date 07/23/2019

Reviewed on 07/23/2019

Trade name: Gardner Color Standard #1 ASTM D 1544-58T

(Contd. of page 8)

· 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) 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