

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/06/2023

Reviewed on 06/06/2023

## 1 Identification

- **Product identifier**
- **Trade name:** Color Standard 500 Units  
APHA for Hazen Color/ASTM D1209
- **Article number:** 2180
- **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 [shermann@aquasolutions.org](mailto:shermann@aquasolutions.org)  
Technical Coordinator  
Sherman Nelson [shermann@aquasolutions.org](mailto:shermann@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

Sensitization - Respiratory 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS05 Corrosion

Skin Corrosion 1A

H314 Causes severe skin burns and eye damage.

Eye Damage 1

H318 Causes serious eye damage.



GHS07

Sensitization - Skin 1

H317 May cause an allergic skin reaction.

- **Label elements**

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

- **Hazard pictograms**



GHS05



GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

Hydrochloric Acid

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*Potassium Platinum Chloride*

· **Hazard statements**

*Causes severe skin burns and eye damage.*

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

*May cause an allergic skin reaction.*

· **Precautionary statements**

*Do not breathe dusts or mists.*

*Wash thoroughly after handling.*

*Contaminated work clothing must not be allowed out of the workplace.*

*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 skin irritation or rash occurs: Get medical advice/attention.*

*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

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = \*3

Fire = 0

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 components:**

CAS: 7647-01-0	Hydrochloric Acid	11.315%
CAS: 16921-30-5	Potassium Platinum Chloride	0.123%

· **Table of Nonhazardous Ingredients**

CAS: 7732-18-5	Water	88.464%
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CAS: 7791-13-1 Cobalt Chloride Hexahydrate

0.098%

## 4 First-aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**  
 Supply fresh air and to be sure call for a doctor.  
 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.
- **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.  
 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).  
 Use neutralizing agent.  
 Dispose contaminated material as waste according to section 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

CAS: 7791-13-1 Cobalt Chloride Hexahydrate

0.24 mg/m<sup>3</sup>

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<b>· PAC-2:</b>		
CAS: 7647-01-0	Hydrochloric Acid	22 ppm
CAS: 7791-13-1	Cobalt Chloride Hexahydrate	25 mg/m <sup>3</sup>
<b>· PAC-3:</b>		
CAS: 7647-01-0	Hydrochloric Acid	100 ppm
CAS: 7791-13-1	Cobalt Chloride Hexahydrate	150 mg/m <sup>3</sup>

## 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.*
- **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 section 7.*
- **Control parameters**

<b>· Components with limit values that require monitoring at the workplace:</b>	
<b>CAS: 7647-01-0 Hydrochloric Acid</b>	
NIOSH RECOMENDED EXP LIM	Ceiling limit value: 7.0 mg/m <sup>3</sup> mg/m <sup>3</sup>
PEL	Ceiling limit value: 7 mg/m <sup>3</sup> , 5 ppm
REL	Ceiling limit value: 7 mg/m <sup>3</sup> , 5 ppm
TLV	Ceiling limit value: 2 ppm
	A4
<b>CAS: 16921-30-5 Potassium Platinum Chloride</b>	
PEL	Long-term value: 0.002 mg/m <sup>3</sup> as Pt
REL	Long-term value: 0.002 mg/m <sup>3</sup> as Pt
TLV	Long-term value: 0.002 mg/m <sup>3</sup> as Pt

- **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.*

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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

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	Yellow-brown
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	Not determined.

· **pH-value at 20 °C (68 °F):** <2

· **Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	100 °C (212 °F)

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not applicable.

· **Decomposition temperature:** Not determined.

· **Ignition temperature:** Product is not selfigniting.

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· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapor pressure at 20 °C (68 °F):</b>	23 hPa (17.3 mm Hg)
· <b>Density at 20 °C (68 °F):</b>	1.01637 g/cm <sup>3</sup> (8.48161 lbs/gal)
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Water:</b>	88.5 %
<b>VOC content:</b>	0.00 %
	0.0 g/l / 0.00 lb/gal
<b>Solids content:</b>	0.2 %
· <b>Other information</b>	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:**

· **LD/LC50 values that are relevant for classification:**

**ATE (Acute Toxicity Estimate)**

Oral	LD50	81,566 mg/kg
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- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:**  
 Strong caustic effect.  
 Strong irritant with the danger of severe eye injury.

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- **Sensitization:**

*Sensitization possible through inhalation.*  
*Sensitization possible through skin contact.*

- **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)**

CAS: 7791-13-1	Cobalt Chloride Hexahydrate	2B
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- **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.*  
*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.*  
 · **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.*

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· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

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## 14 Transport information

· **UN-Number**  
 · **DOT, IMDG, IATA**

UN3264

· **UN proper shipping name**  
 · **DOT**  
 · **IMDG, IATA**

Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric Acid)  
**CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.**  
 (Hydrochloric Acid)

· **Transport hazard class(es)**

· **DOT**



· **Class**  
 · **Label**

8 Corrosive substances  
 8

· **IMDG, IATA**



· **Class**  
 · **Label**

8 Corrosive substances  
 8

· **Packing group**  
 · **DOT, IMDG, IATA**

II

· **Environmental hazards:**  
 · **Marine pollutant:**

No

· **Special precautions for user**  
 · **Hazard identification number (Kemler code):**  
 · **EMS Number:**  
 · **Segregation groups**  
 · **Stowage Category**  
 · **Stowage Code**  
 · **Segregation Code**

Warning: Corrosive substances  
 80  
 F-A,S-B  
 (SGG1) Acids  
 B  
 SW2 Clear of living quarters.  
 SG36 Stow "separated from" SGG18-alkalis.  
 SG49 Stow "separated from" SGG6-cyanides

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**

· **DOT**  
 · **Quantity limitations**

On passenger aircraft/rail: 1 L  
 On cargo aircraft only: 30 L

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- **IMDG**

- **Limited quantities (LQ)**
- **Excepted quantities (EQ)**

1L

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

- **UN "Model Regulation":**

UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
 (HYDROCHLORIC ACID), 8, II

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
 No further relevant information available.

- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

CAS: 7791-13-1 | Cobalt Chloride Hexahydrate

- **TSCA (Toxic Substances Control Act):**

Water

ACTIVE

Hydrochloric Acid

ACTIVE

Potassium Platinum Chloride

ACTIVE

- **Hazardous Air Pollutants**

CAS: 7647-01-0 | Hydrochloric Acid

CAS: 7791-13-1 | Cobalt Chloride Hexahydrate

- **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)**

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).

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· **Hazard pictograms**



GHS05 GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

*Hydrochloric Acid*

*Potassium Platinum Chloride*

· **Hazard statements**

*Causes severe skin burns and eye damage.*

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

*May cause an allergic skin reaction.*

· **Precautionary statements**

*Do not breathe dusts or mists.*

*Wash thoroughly after handling.*

*Contaminated work clothing must not be allowed out of the workplace.*

*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 skin irritation or rash occurs: Get medical advice/attention.*

*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 1.0 06/06/2023 Reviewed SDS for accuracy. STN*

*Revision 1.0 01-10-2022, removed fluoride and sulfate from ingredients. STN*

*Creation date for SDS 12-07-2018. STN*

*Revision 1.0, 06-01-2023: Reviewed and updated SDS. STN*

*06/06/2023*

· **Abbreviations and acronyms:**

*IMDG: International Maritime Code for Dangerous Goods*

*DOT: US Department of Transportation*

*IATA: International Air Transport Association*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*ELINCS: European List of Notified Chemical Substances*

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*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 Corrosion 1A: Skin corrosion/irritation – Category 1A**Eye Damage 1: Serious eye damage/eye irritation – Category 1**Sensitization - Respiratory 1: Respiratory sensitisation – Category 1**Sensitization - Skin 1: Skin sensitisation – Category 1***· \* Data compared to the previous version altered.**

US