

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/31/2024

Reviewed on 05/31/2024

## 1 Identification

- **Product identifier**
- **Trade name:** Hexavalent Chromium  
4.0 ppm Solution
- **Article number:** STA044
- **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)
- **Emergency telephone number:**  
Chemtrec: 800-424-9300  
Canutec: 613-996-6666



## 2 Hazard(s) identification

- **Classification of the substance or mixture**  
The product is not classified, according to the Globally Harmonized System (GHS).
- **Label elements**
- **GHS label elements** Not Applicable
- **Hazard pictograms** Not Applicable
- **Signal word** Not Applicable
- **Hazard statements** Not Applicable
- **Precautionary statements**  
If swallowed: Call a poison center/doctor if you feel unwell.  
If on skin: Wash with plenty of water.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**

|   |   |   |
|---|---|---|
| 0 | 0 | 0 |
|---|---|---|

  - Health = 0
  - Fire = 0
  - Reactivity = 0
- **HMIS-ratings (scale 0 - 4)**

|            |   |                |
|------------|---|----------------|
| HEALTH     | 1 | Health = 1     |
| FIRE       | 0 | Fire = 0       |
| REACTIVITY | 0 | Reactivity = 0 |
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

US

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/31/2024

Reviewed on 05/31/2024

**Trade name: Hexavalent Chromium  
4.0 ppm Solution**

(Contd. of page 1)

### 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.
- **Dangerous components:** Not Applicable

· **Table of Nonhazardous Ingredients**

|                |                      |         |
|----------------|----------------------|---------|
| CAS: 7732-18-5 | Water                | 99.999% |
| CAS: 7778-50-9 | Potassium Dichromate | 0.001%  |

### 4 First-aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately rinse with water.
- **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.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **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).  
Dispose contaminated material as waste according to section 13.
- **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-I:**

|                |                      |                        |
|----------------|----------------------|------------------------|
| CAS: 7778-50-9 | Potassium Dichromate | 0.42 mg/m <sup>3</sup> |
|----------------|----------------------|------------------------|

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/31/2024

Reviewed on 05/31/2024

**Trade name: Hexavalent Chromium  
4.0 ppm Solution**

(Contd. of page 2)

|                 |                      |                       |
|-----------------|----------------------|-----------------------|
| · <b>PAC-2:</b> |                      |                       |
| CAS: 7778-50-9  | Potassium Dichromate | 7.4 mg/m <sup>3</sup> |
| · <b>PAC-3:</b> |                      |                       |
| CAS: 7778-50-9  | Potassium Dichromate | 44 mg/m <sup>3</sup>  |

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special measures required.
- **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:** None.
- **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**
- **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:**  
The usual precautionary measures for handling chemicals should be followed.
- **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

- **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:** Goggles recommended during refilling.

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/31/2024

Reviewed on 05/31/2024

**Trade name: Hexavalent Chromium  
4.0 ppm Solution**

(Contd. of page 3)

· **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>          | Light orange color |
| <b>Odor:</b>           | Odorless           |
| <b>Odor threshold:</b> | Not determined.    |

· **pH-value:** Not determined.

· **Change in condition**

|                                     |                 |
|-------------------------------------|-----------------|
| <b>Melting point/Melting range:</b> | 0 °C (32 °F)    |
| <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.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

|               |                 |
|---------------|-----------------|
| <b>Lower:</b> | Not determined. |
| <b>Upper:</b> | Not determined. |

· **Vapor pressure at 20 °C (68 °F):** 23 hPa (17.3 mm Hg)

· **Density at 20 °C (68 °F):** 1.00001 g/cm<sup>3</sup> (8.34508 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/water):** Not determined.

· **Viscosity:**

|                   |                 |
|-------------------|-----------------|
| <b>Dynamic:</b>   | Not determined. |
| <b>Kinematic:</b> | Not determined. |

· **Solvent content:**

|                     |                       |
|---------------------|-----------------------|
| <b>Water:</b>       | 100.0 %               |
| <b>VOC content:</b> | 0.00 %                |
|                     | 0.0 g/l / 0.00 lb/gal |

**Solids content:** 0.0 %

· **Other information** No further relevant information available.

US

(Contd. on page 5)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 05/31/2024

Reviewed on 05/31/2024

**Trade name: Hexavalent Chromium  
4.0 ppm Solution**

(Contd. of page 4)

### 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.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product is not subject to classification according to internally approved calculation methods for preparations:  
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

|                |                      |   |
|----------------|----------------------|---|
| CAS: 7778-50-9 | Potassium Dichromate | I |
|----------------|----------------------|---|

- **NTP (National Toxicology Program)**

|                |                      |   |
|----------------|----------------------|---|
| CAS: 7778-50-9 | Potassium Dichromate | K |
|----------------|----------------------|---|

- **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.

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/31/2024

Reviewed on 05/31/2024

**Trade name: Hexavalent Chromium  
4.0 ppm Solution**

(Contd. of page 5)

· **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Smaller quantities can be disposed of with household waste.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

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

## 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: 7778-50-9 | Potassium Dichromate

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

Water

ACTIVE

Potassium Dichromate

ACTIVE

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/31/2024

Reviewed on 05/31/2024

**Trade name: Hexavalent Chromium  
4.0 ppm Solution**

(Contd. of page 6)

|  |                      |
|--|----------------------|
| · <b>Hazardous Air Pollutants</b>  |                      |
| CAS: 7778-50-9   | Potassium Dichromate |
| · <b>Proposition 65</b>  |                      |
| · <b>Chemicals known to cause cancer:</b>  |                      |
| CAS: 7778-50-9   | Potassium Dichromate |
| · <b>Chemicals known to cause reproductive toxicity for females:</b>   |                      |
| CAS: 7778-50-9   | Potassium Dichromate |
| · <b>Chemicals known to cause reproductive toxicity for males:</b>   |                      |
| CAS: 7778-50-9   | Potassium Dichromate |
| · <b>Chemicals known to cause developmental toxicity:</b>  |                      |
| CAS: 7778-50-9   | Potassium Dichromate |
| · <b>Carcinogenic categories</b>   |                      |
| · <b>EPA (Environmental Protection Agency)</b>   |                      |
| CAS: 7778-50-9   | Potassium Dichromate |
| A(inh), D(oral), K/L(inh), CBD(oral)   |                      |
| · <b>TLV (Threshold Limit Value)</b>   |                      |
| CAS: 7778-50-9   | Potassium Dichromate |
| AI   |                      |
| · <b>NIOSH-Ca (National Institute for Occupational Safety and Health)</b>  |                      |
| CAS: 7778-50-9   | Potassium Dichromate |
| · <b>GHS label elements</b> Not Applicable   |                      |
| · <b>Hazard pictograms</b> Not Applicable  |                      |
| · <b>Signal word</b> Not Applicable  |                      |
| · <b>Hazard statements</b> Not Applicable  |                      |
| · <b>Precautionary statements</b>  |                      |
| If swallowed: Call a poison center/doctor if you feel unwell.  |                      |
| If on skin: Wash with plenty of water.   |                      |
| If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |                      |
| Dispose of contents/container in accordance with local/regional/national/international regulations.                              |                      |
| · <b>Chemical safety assessment:</b> 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:

· **Date of preparation / last revision**

Revision 1.2, 05/31/2024: Reviewed SDS for accuracy. MH/STN  
05/31/2024

· **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

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

(Contd. on page 8)

**Safety Data Sheet**  
**acc. to OSHA HCS**

Printing date 05/31/2024

Reviewed on 05/31/2024

**Trade name: Hexavalent Chromium**  
**4.0 ppm Solution**

(Contd. of page 7)

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

· **\* Data compared to the previous version altered.**

US