

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/22/2023

Reviewed on 05/22/2023

1 Identification

- **Product identifier**
- **Trade name:** Potassium Chromate
10% w/v Solution
- **Article number:** 7025
- **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
Technical Coordinator
Sherman Nelson 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

Germ Cell Mutagenicity 1B H340 May cause genetic defects.

Carcinogenicity 1B H350 May cause cancer.



GHS07

Acute Toxicity - Oral 4 H302 Harmful if swallowed.

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**



GHS07



GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**
Potassium Chromate
- **Hazard statements**
Harmful if swallowed.
May cause an allergic skin reaction.
May cause genetic defects.

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May cause cancer.

· **Precautionary statements**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

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

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

If on skin: Wash with plenty of water.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

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

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 = 1

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 2

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: 7789-00-6	Potassium Chromate	9.404%
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· **Table of Nonhazardous Ingredients**

CAS: 7732-18-5	Water	90.596%
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4 First-aid measures

· **Description of first aid measures**

· **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

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- **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.
- **After swallowing:** 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** 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:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
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.
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: 7789-00-6	Potassium Chromate	0.56 mg/m ³
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- **PAC-2:**

CAS: 7789-00-6	Potassium Chromate	9.7 mg/m ³
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- **PAC-3:**

CAS: 7789-00-6	Potassium Chromate	58 mg/m ³
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7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.

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- **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**

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

CAS: 7789-00-6 Potassium Chromate

PEL Long-term value: 0.005* mg/m³
 Ceiling limit value: 0.1** mg/m³
 *as Cr(VI) **as CrO₃; see 29 CFR 1910.1026

REL Long-term value: 0.0002 mg/m³
 as Cr; See Pocket Guide Apps. A and C

TLV Short-term value: 0.0005 mg/m³
 Long-term value: 0.0002 mg/m³
 as Cr(VI); inhalable, Skin; BEI, DSEN, RSEN

· **Ingredients with biological limit values:**

CAS: 7789-00-6 Potassium Chromate

BEI 25 µg/L
 LD50 Intraperitoneal: urine
 Time: end of shift at end of workweek
 LD50: Total chromium (fume)

10 µg/L
 LD50 Intraperitoneal: urine
 Time: increase during shift
 LD50: Total chromium (fume)

· **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.
- Store protective clothing separately.

· **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.

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· **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:**

Form:	Liquid
Color:	Light 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.

· **Ignition temperature:** 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)

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· Density at 20 °C (68 °F):	1.06337 g/cm ³ (8.87382 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.

· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
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· Partition coefficient (n-octanol/water):	Not determined.
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· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.

· Solvent content:	
Water:	90.6 %
VOC content:	0.00 %
	0.0 g/l / 0.00 lb/gal

Solids content:	9.4 %
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· 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)		
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Oral	LD50	1,914 mg/kg (mouse)
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- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**

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

Harmful

Irritant

The product can cause inheritable damage.

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· **Carcinogenic categories**

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

CAS: 7789-00-6	Potassium Chromate	I
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· **NTP (National Toxicology Program)**

CAS: 7789-00-6	Potassium Chromate	K
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· **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 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

· **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.

14 Transport information

· **UN-Number**

· **DOT, IMDG, IATA** UN3082

· **UN proper shipping name**

· **DOT** Environmentally hazardous substance, liquid, n.o.s. (Potassium Chromate)

· **IMDG, IATA**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Potassium Chromate)

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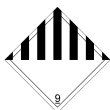
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· **Transport hazard class(es)**

· **DOT, IMDG**



· **Class**

9 Miscellaneous dangerous substances and articles

· **Label**

9

· **IATA**



· **Class**

9 Miscellaneous dangerous substances and articles

· **Label**

9

· **Packing group**

· **DOT, IMDG, IATA**

III

· **Environmental hazards:**

· **Marine pollutant:**

No

· **Special marking (IATA):**

Symbol (fish and tree)

· **Special precautions for user**

Warning: Miscellaneous dangerous substances and articles

· **Hazard identification number (Kemler code):**

90

· **EMS Number:**

F-A,S-F

· **Stowage Category**

A

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

Not applicable.

· **UN "Model Regulation":**

UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (POTASSIUM CHROMATE), 9, III

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Sara**

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

None of the ingredients is listed.

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

CAS: 7789-00-6 | Potassium Chromate

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

Water

ACTIVE

Potassium Chromate

ACTIVE

· **Hazardous Air Pollutants**

CAS: 7789-00-6 | Potassium Chromate

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· **Proposition 65**

· **Chemicals known to cause cancer:**

CAS: 7789-00-6	Potassium Chromate
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· **Chemicals known to cause reproductive toxicity for females:**

CAS: 7789-00-6	Potassium Chromate
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· **Chemicals known to cause reproductive toxicity for males:**

CAS: 7789-00-6	Potassium Chromate
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· **Chemicals known to cause developmental toxicity:**

CAS: 7789-00-6	Potassium Chromate
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· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

CAS: 7789-00-6	Potassium Chromate	A(inh), D(oral), K/L(inh), CBD(oral)
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· **TLV (Threshold Limit Value)**

CAS: 7789-00-6	Potassium Chromate	AI
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· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

CAS: 7789-00-6	Potassium Chromate
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· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS07 GHS08

· **Signal word** *Danger*

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

Potassium Chromate

· **Hazard statements**

Harmful if swallowed.

May cause an allergic skin reaction.

May cause genetic defects.

May cause cancer.

· **Precautionary statements**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

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

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

If on skin: Wash with plenty of water.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

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

Wash contaminated clothing before reuse.

Store locked up.

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Dispose of contents/container in accordance with local/regional/national/international regulations.

- **National regulations:**
- **Additional classification according to Decree on Hazardous Materials:**
Carcinogenic hazardous material group III (dangerous).
- **Information about limitation of use:**
Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.
- **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 05/22/2023, reviewed SDS for accuracy. S.T.N.
Revision 1.0 01-10-2022, removed fluoride and sulfate from ingredients. STN
Revision 1.0, 12-30-2019: Added additional ingredients per customer request. STN
05/22/2023
- **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
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
BEI: Biological Exposure Limit
Acute Toxicity - Oral 4: Acute toxicity – Category 4
Sensitization - Skin 1: Skin sensitisation – Category 1
Germ Cell Mutagenicity 1B: Germ cell mutagenicity – Category 1B
Carcinogenicity 1B: Carcinogenicity – Category 1B
- *** Data compared to the previous version altered.**