

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/10/2023

Reviewed on 05/10/2023

## 1 Identification

- **Product identifier**
- **Trade name:** Potassium Iodide  
2.1% w/v Solution
- **Article number:** AXI012
- **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
- **Emergency telephone number:**  
Chemtrec: 800-424-9300  
Canutec: 613-996-6666



## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Specific Target Organ Toxicity - Repeated Exposure 1 H372 Causes damage to organs through prolonged or repeated exposure.

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



GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
Potassium Iodide
- **Hazard statements**  
Causes damage to organs through prolonged or repeated exposure.
- **Precautionary statements**  
Do not breathe dust/fume/gas/mist/vapors/spray.  
Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
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.

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

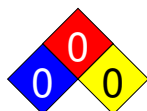
Printing date 05/10/2023

Reviewed on 05/10/2023

**Trade name: Potassium Iodide**  
**2.1% w/v Solution**

(Contd. of page 1)

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 0  
 Fire = 0  
 Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = 0  
 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: 7681-11-0	Potassium Iodide	2.07%
----------------	------------------	-------

### · **Table of Nonhazardous Ingredients**

CAS: 7732-18-5	Water	97.93%
----------------	-------	--------

## 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.
- **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**  
 During heating or in case of fire poisonous gases are produced.

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/10/2023

Reviewed on 05/10/2023

**Trade name: Potassium Iodide**  
**2.1% w/v Solution**

(Contd. of page 2)

- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Mount respiratory protective device.
- **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).  
 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: 7681-11-0	Potassium Iodide	1.3 mg/m <sup>3</sup>
----------------	------------------	-----------------------

### · PAC-2:

CAS: 7681-11-0	Potassium Iodide	15 mg/m <sup>3</sup>
----------------	------------------	----------------------

### · PAC-3:

CAS: 7681-11-0	Potassium Iodide	87 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:** 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:

CAS: 7681-11-0 Potassium Iodide	
---------------------------------	--

TLV	Long-term value: 0.01 ppm
	A4; Skin; *inhalation

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

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/10/2023

Reviewed on 05/10/2023

**Trade name:** Potassium Iodide  
2.1% w/v Solution

(Contd. of page 3)

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

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.

· **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: Clear

· **Odor:** Odorless

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range: 0 °C (32 °F)

Boiling point/Boiling range: 100 °C (212 °F)

· **Flash point:** Not applicable.

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

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/10/2023

Reviewed on 05/10/2023

**Trade name:** Potassium Iodide  
2.1% w/v Solution

(Contd. of page 4)

· <b>Decomposition temperature:</b>	Not determined.
· <b>Ignition temperature:</b>	Product is not selfigniting.
· <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>	1.0143 g/cm <sup>3</sup> (8.46433 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>	97.9 %
<b>VOC content:</b>	0.00 %
	0.0 g/l / 0.00 lb/gal
<b>Solids content:</b>	2.1 %
· <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:**
  - **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 shows the following dangers according to internally approved calculation methods for preparations:

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/10/2023

Reviewed on 05/10/2023

**Trade name: Potassium Iodide**  
**2.1% w/v Solution**

(Contd. of page 5)

· **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.

· **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:**

Not applicable.

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/10/2023

Reviewed on 05/10/2023

**Trade name: Potassium Iodide**  
**2.1% w/v Solution**

(Contd. of page 6)

· **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

· **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):**

None of the ingredients is listed.

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

Water

ACTIVE

Potassium Iodide

ACTIVE

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **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).

· **Hazard pictograms**



GHS08

(Contd. on page 8)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/10/2023

Reviewed on 05/10/2023

**Trade name: Potassium Iodide**  
**2.1% w/v Solution**

(Contd. of page 7)

- **Signal word** *Danger*
- **Hazard-determining components of labeling:**  
*Potassium Iodide*
- **Hazard statements**  
*Causes damage to organs through prolonged or repeated exposure.*
- **Precautionary statements**  
*Do not breathe dust/fume/gas/mist/vapors/spray.*  
*Wash thoroughly after handling.*  
*Do not eat, drink or smoke when using this product.*  
*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.*
- **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 05/10/2023, reviewed SDS for accuracy. STN*  
*Revision 2.0, 01-12-2020: Updated sections 1, 2 and 15 to meet Fann's new requirements*  
*05/10/2023*
- **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)*  
*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*  
*Specific Target Organ Toxicity - Repeated Exposure 1: Specific target organ toxicity (repeated exposure) – Category 1*
- **\* Data compared to the previous version altered.**

US