

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/31/2022

Reviewed on 03/31/2022

## 1 Identification

- **Product identifier**
- **Trade name:** Potassium Pyroantimonate TS
- **Article number:** 6872
- **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**



GHS08 Health hazard

Carcinogenicity 2

H351 Suspected of causing cancer.

Specific Target Organ Toxicity - Single Exposure 1

H370 Causes damage to organs.

Specific Target Organ Toxicity - Repeated Exposure 1

H372 Causes damage to organs through prolonged or repeated exposure.



GHS05 Corrosion

Corrosive to Metals 1

H290 May be corrosive to metals.

Eye Damage 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**



GHS05



GHS08

- **Signal word** Danger

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

Potassium Hydroxide

- **Hazard statements**

May be corrosive to metals.

Causes serious eye damage.

Suspected of causing cancer.

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*Causes damage to organs.*

*Causes damage to organs through prolonged or repeated exposure.*

**· Precautionary statements**

*Obtain special instructions before use.*

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

*Keep only in original container.*

*Do not breathe dust/fume/gas/mist/vapors/spray.*

*Wash thoroughly after handling.*

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

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

*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.*

*IF exposed or concerned: Get medical advice/attention.*

*Specific treatment (see on this label).*

*Get medical advice/attention if you feel unwell.*

*Absorb spillage to prevent material damage.*

*Store locked up.*

*Store in corrosive resistant container with a resistant inner liner.*

*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: 1310-58-3	Potassium Hydroxide	1.631%
CAS: 12208-13-8	Potassium Pyroantimonate (Potassium Hexahydroantimonate (V))	1.305%

**· Table of Nonhazardous Ingredients**

CAS: 7732-18-5	Water	97.01%
CAS: 1310-73-2	Sodium Hydroxide	0.054%

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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.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **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.
- **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 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**

- **PAC-1:**

CAS: 1310-58-3	Potassium Hydroxide	0.18 mg/m <sup>3</sup>
CAS: 12208-13-8	Potassium Pyroantimonate (Potassium Hexahydroantimonate (V))	3.2 mg/m <sup>3</sup>
CAS: 1310-73-2	Sodium Hydroxide	0.5 mg/m <sup>3</sup>

- **PAC-2:**

CAS: 1310-58-3	Potassium Hydroxide	2 mg/m <sup>3</sup>
CAS: 12208-13-8	Potassium Pyroantimonate (Potassium Hexahydroantimonate (V))	28 mg/m <sup>3</sup>

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CAS: 1310-73-2	Sodium Hydroxide	5 mg/m <sup>3</sup>
<b>· PAC-3:</b>		
CAS: 1310-58-3	Potassium Hydroxide	54 mg/m <sup>3</sup>
CAS: 12208-13-8	Potassium Pyroantimonate (Potassium Hexahydroantimonate (V))	170 mg/m <sup>3</sup>
CAS: 1310-73-2	Sodium Hydroxide	50 mg/m <sup>3</sup>

## 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.
- **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 item 7.
- **Control parameters**

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

<b>CAS: 1310-58-3 Potassium Hydroxide</b>	
REL	Ceiling limit value: 2 mg/m <sup>3</sup>
TLV	Ceiling limit value: 2 mg/m <sup>3</sup>
<b>CAS: 12208-13-8 Potassium Pyroantimonate (Potassium Hexahydroantimonate (V))</b>	
PEL	Long-term value: 0.5 mg/m <sup>3</sup> as Sb
REL	Long-term value: 0.5 mg/m <sup>3</sup> as Sb
TLV	Long-term value: 0.5 mg/m <sup>3</sup> as Sb

- **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.  
 Avoid contact with the eyes.  
 Avoid contact with the eyes and skin.

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- **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>	Colorless
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	Not determined.

- **pH-value at 20 °C (68 °F):** >12

- **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.

- **Auto igniting:** Product is not selfigniting.

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

- **Explosion limits:**

<b>Lower:</b>	Not determined.
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<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 g/cm <sup>3</sup> (8.345 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>	97.0 %
<b>VOC content:</b>	0.00 % 0.0 g/l / 0.00 lb/gal
<b>Solids content:</b>	3.0 %
· <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	17,029 mg/kg
Inhalative	LC50/4h	115 mg/l

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant

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· **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:**

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 increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, 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.

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

## 14 Transport information

· **UN-Number**

· **DOT, IMDG, IATA**

UN3266

· **UN proper shipping name**

· **DOT**

Corrosive liquid, basic, inorganic, n.o.s. (Potassium Hydroxide, Sodium Hydroxide)

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· **IMDG, IATA** *CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium Hydroxide, Sodium Hydroxide)*

· **Transport hazard class(es)**

· **DOT**



· **Class** 8 Corrosive substances  
 · **Label** 8

· **IMDG, IATA**



· **Class** 8 Corrosive substances  
 · **Label** 8

· **Packing group**

· **DOT, IMDG, IATA** III

· **Environmental hazards:** *Not applicable.*

· **Special precautions for user** *Warning: Corrosive substances*

· **Hazard identification number (Kemler code):** 80

· **EMS Number:** *F-A,S-B*

· **Segregation groups** *Alkalis*

· **Stowage Category** *A*

· **Segregation Code** *SG22 Stow "away from" ammonium salts  
SG35 Stow "separated from" SGG1-acids*

· **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: 5 L  
On cargo aircraft only: 60 L*

· **IMDG**

· **Limited quantities (LQ)** 5L

· **Excepted quantities (EQ)** *Code: E1  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 1000 ml*

· **UN "Model Regulation":** *UN 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.  
(POTASSIUM HYDROXIDE, SODIUM HYDROXIDE), 8, III*

## 15 Regulatory information

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

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· **Sara**

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

None of the ingredients is listed.

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

CAS: 12208-13-8 | Potassium Pyroantimonate (Potassium Hexahydroantimonate (V))

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

Water

ACTIVE

Potassium Hydroxide

ACTIVE

Sodium Hydroxide

ACTIVE

· **Hazardous Air Pollutants**

CAS: 12208-13-8 | Potassium Pyroantimonate (Potassium Hexahydroantimonate (V))

· **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**



GHS05    GHS08

· **Signal word** Danger

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

Potassium Hydroxide

· **Hazard statements**

May be corrosive to metals.

Causes serious eye damage.

Suspected of causing cancer.

Causes damage to organs.

Causes damage to organs through prolonged or repeated exposure.

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· **Precautionary statements**

- Obtain special instructions before use.*
  - Do not handle until all safety precautions have been read and understood.*
  - Keep only in original container.*
  - Do not breathe dust/fume/gas/mist/vapors/spray.*
  - Wash thoroughly after handling.*
  - Do not eat, drink or smoke when using this product.*
  - Wear protective gloves/protective clothing/eye protection/face protection.*
  - 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.*
  - IF exposed or concerned: Get medical advice/attention.*
  - Specific treatment (see on this label).*
  - Get medical advice/attention if you feel unwell.*
  - Absorb spillage to prevent material damage.*
  - Store locked up.*
  - Store in corrosive resistant container with a resistant inner liner.*
  - 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 0.0 03-31-2022: Creation date for SDS. STN/JH  
03/31/2022 / 1.1*

· **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*
  - Corrosive to Metals 1: Corrosive to metals – Category 1*
  - Eye Damage 1: Serious eye damage/eye irritation – Category 1*
  - Carcinogenicity 2: Carcinogenicity – Category 2*
  - Specific Target Organ Toxicity - Single Exposure 1: Specific target organ toxicity (single exposure) – Category 1*
  - Specific Target Organ Toxicity - Repeated Exposure 1: Specific target organ toxicity (repeated exposure) – Category 1*
- **\* Data compared to the previous version altered.**