

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/23/2024

Reviewed on 09/23/2024

## 1 Identification

- **Product identifier**
- **Trade name:** Mixed Anion Standard  
1.0% w/v each Component
- **Article number:** VEN025
- **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**



GHS07

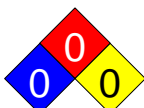
Acute Toxicity - Inhalation 4 H332 Harmful if inhaled.

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



GHS07

- **Signal word** Warning
- **Hazard-determining components of labeling:**  
Sodium Thiocyanate  
sodium formate
- **Hazard statements**  
Harmful if inhaled.
- **Precautionary statements**  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
Call a poison center/doctor if you feel unwell.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 0  
Fire = 0  
Reactivity = 0

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/23/2024

Reviewed on 09/23/2024

**Trade name: Mixed Anion Standard**  
**1.0% w/v each Component**

(Contd. of page 1)

· **HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	0	Fire = 0
REACTIVITY	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: 62-76-0	Sodium Oxalate	1.459%
CAS: 141-53-7	sodium formate	1.447%
CAS: 7757-82-6	Sodium Sulfate Anhydrous	1.417%
CAS: 540-72-7	Sodium Thiocyanate	1.338%

· **Table of Nonhazardous Ingredients**

CAS: 7732-18-5	Water	88.058%
CAS: 10102-17-7	Sodium Thiosulfate Pentahydrate, Reagent ACS	2.12%
CAS: 7647-14-5	Sodium Chloride	1.579%
CAS: 127-09-3	Sodium Acetate Anhydrous	1.331%
CAS: 2836-32-0	Sodium Glycolate	1.252%

### 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. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **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.

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/23/2024

Reviewed on 09/23/2024

**Trade name: Mixed Anion Standard**  
**1.0% w/v each Component**

(Contd. of page 2)

- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:** 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: 10102-17-7	Sodium Thiosulfate Pentahydrate, Reagent ACS	50 mg/m <sup>3</sup>
CAS: 62-76-0	Sodium Oxalate	11 mg/m <sup>3</sup>
CAS: 141-53-7	sodium formate	0.45 mg/m <sup>3</sup>
CAS: 7757-82-6	Sodium Sulfate Anhydrous	9.8 mg/m <sup>3</sup>
CAS: 540-72-7	Sodium Thiocyanate	0.7 mg/m <sup>3</sup>
CAS: 127-09-3	Sodium Acetate Anhydrous	11 mg/m <sup>3</sup>
CAS: 2836-32-0	Sodium Glycolate	5.1 ppm

- **PAC-2:**

CAS: 10102-17-7	Sodium Thiosulfate Pentahydrate, Reagent ACS	54 ppm
CAS: 62-76-0	Sodium Oxalate	68 ppm
CAS: 141-53-7	sodium formate	25 ppm
CAS: 7757-82-6	Sodium Sulfate Anhydrous	110 mg/m <sup>3</sup>
CAS: 540-72-7	Sodium Thiocyanate	7.7 mg/m <sup>3</sup>
CAS: 127-09-3	Sodium Acetate Anhydrous	120 mg/m <sup>3</sup>
CAS: 2836-32-0	Sodium Glycolate	230 mg/m <sup>3</sup>

- **PAC-3:**

CAS: 10102-17-7	Sodium Thiosulfate Pentahydrate, Reagent ACS	320 ppm
CAS: 62-76-0	Sodium Oxalate	400 ppm
CAS: 141-53-7	sodium formate	250 ppm
CAS: 7757-82-6	Sodium Sulfate Anhydrous	650 mg/m <sup>3</sup>
CAS: 540-72-7	Sodium Thiocyanate	46 mg/m <sup>3</sup>
CAS: 127-09-3	Sodium Acetate Anhydrous	700 mg/m <sup>3</sup>
CAS: 2836-32-0	Sodium Glycolate	1400 mg/m <sup>3</sup>

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.

(Contd. on page 4)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 09/23/2024

Reviewed on 09/23/2024

**Trade name: Mixed Anion Standard**  
**1.0% w/v each Component**

(Contd. of page 3)

- **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:**  
 The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.  
 At this time, the other constituents have no known exposure limits.

**CAS: 7757-82-6 Sodium Sulfate Anhydrous**

TLV	Short-term value: NIC-0.2 mg/m <sup>3</sup> thoracic fraction of aerosol
-----	---

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **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:**  
 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:** Not required.
- **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>	Clear
<b>Odor:</b>	Odorless

(Contd. on page 5)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/23/2024

Reviewed on 09/23/2024

**Trade name: Mixed Anion Standard**  
**1.0% w/v each Component**

(Contd. of page 4)

· <b>Odor threshold:</b>	Not determined.
· <b>pH-value:</b>	Not determined.
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	100 °C (212 °F)
· <b>Flash point:</b>	Not applicable.
· <b>Flammability:</b>	Not determined.
· <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:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not applicable.
· <b>Solubility in / Miscibility with</b>	
<b>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>	88.1 %
<b>VOC content:</b>	0.00 %
<b>Solids content:</b>	11.9 %
· <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.

US

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/23/2024

Reviewed on 09/23/2024

**Trade name: Mixed Anion Standard**  
**1.0% w/v each Component**

(Contd. of page 5)

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

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

### ATE (Acute Toxicity Estimate)

Oral	LD50	21,423 mg/kg
Dermal	LD50	39,341 mg/kg
Inhalative	LC50/4h	79.8-112 mg/l

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:** Harmful

- **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.
- **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.

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/23/2024

Reviewed on 09/23/2024

**Trade name: Mixed Anion Standard**  
**1.0% w/v each Component**

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

(Contd. of page 6)

## 14 Transport information

· <b>UN-Number</b> · <b>DOT, IMDG, IATA</b>	Not regulated
· <b>UN proper shipping name</b> · <b>DOT, IMDG, IATA</b>	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>	Not applicable.
· <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):**

None of the ingredients is listed.

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

Water	ACTIVE
Sodium Chloride	ACTIVE
Sodium Oxalate	ACTIVE
sodium formate	ACTIVE
Sodium Sulfate Anhydrous	ACTIVE
Sodium Thiocyanate	ACTIVE
Sodium Acetate Anhydrous	ACTIVE
Sodium Glycolate	ACTIVE

· **Hazardous Air Pollutants**

None of the ingredients is listed.

(Contd. on page 8)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/23/2024

Reviewed on 09/23/2024

**Trade name: Mixed Anion Standard**  
**1.0% w/v each Component**

(Contd. of page 7)

- **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**



GHS07

- **Signal word** Warning

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

Sodium Thiocyanate

sodium formate

- **Hazard statements**

Harmful if inhaled.

- **Precautionary statements**

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

Use only outdoors or in a well-ventilated area.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a poison center/doctor if you feel unwell.

- **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:

- **Date of preparation / last revision**

Revision 0.0, 09-23-2024: Creation date for SDS. CMC/STN

09/23/2024 / -

(Contd. on page 9)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/23/2024

Reviewed on 09/23/2024

**Trade name: Mixed Anion Standard**  
**1.0% w/v each Component**

(Contd. of page 8)

**· 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*  
*Acute Toxicity - Inhalation 4: Acute toxicity – Category 4*

US