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:** VEN026

· **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**

GHS07

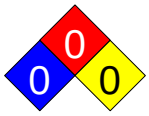
Acute Toxicity - Inhalation 4 H332 Harmful if inhaled.

· **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/m³
CAS: 62-76-0	Sodium Oxalate	11 mg/m³
CAS: 141-53-7	sodium formate	0.45 mg/m³
CAS: 7757-82-6	Sodium Sulfate Anhydrous	9.8 mg/m³
CAS: 540-72-7	Sodium Thiocyanate	0.7 mg/m³
CAS: 127-09-3	Sodium Acetate Anhydrous	11 mg/m³
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/m³
CAS: 540-72-7	Sodium Thiocyanate	7.7 mg/m³
CAS: 127-09-3	Sodium Acetate Anhydrous	120 mg/m³
CAS: 2836-32-0	Sodium Glycolate	230 mg/m3

· **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/m³
CAS: 540-72-7	Sodium Thiocyanate	46 mg/m³
CAS: 127-09-3	Sodium Acetate Anhydrous	700 mg/m³
CAS: 2836-32-0	Sodium Glycolate	1400 mg/m3

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/m³ 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:**
Form: Liquid
Color: Clear
· **Odor:** Odorless

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

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

(Contd. of page 4)

· **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:**	Not determined.
· **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)
· **Density:**	Not determined.
· **Relative density**	Not determined.
· **Vapor density**	Not determined.
· **Evaporation rate**	Not applicable.
· **Solubility in / Miscibility with**	
Water:	Fully miscible.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Water:	88.1 %
VOC content:	0.00 %
Solids content:	11.9 %
· **Other information**	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.

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

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

(Contd. of page 6)

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

14 Transport information

· **UN-Number**	
· **DOT, IMDG, IATA**	Not regulated
· **UN proper shipping name**	
· **DOT, 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.
· **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
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