

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/29/2024

Reviewed on 05/29/2024

1 Identification

- **Product identifier**
- **Trade name:** Anion Mix 1000 ppm Each
Cl,NO₃,PO₄,SO₄,Br,I,CO₃
- **Article number:** ANI016
- **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

Toxic to Reproduction 2 H361 Suspected of damaging fertility or the unborn child.

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



GHS08

- **Signal word** Warning
- **Hazard-determining components of labeling:**
Sodium Bromide
- **Hazard statements**
Suspected of damaging fertility or the unborn child.
- **Precautionary statements**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.
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.
Store locked up.
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 05/29/2024

Reviewed on 05/29/2024

Trade name: Anion Mix 1000 ppm Each
 $Cl, NO_3, PO_4, SO_4, Br, I, CO_3$

(Contd. of page 1)

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



Health = 0
 Fire = 0
 Reactivity = 0

- **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: 7647-15-6	Sodium Bromide	0.129%
----------------	----------------	--------

· **Table of Nonhazardous Ingredients**

CAS: 7732-18-5	Water	98.953%
CAS: 497-19-8	Sodium Carbonate Anhydrous	0.177%
CAS: 7647-14-5	Sodium Chloride	0.165%
CAS: 7757-79-1	Potassium Nitrate	0.163%
CAS: 7558-79-4	Sodium Phosphate Dibasic Anhydrous	0.149%
CAS: 7757-82-6	Sodium Sulfate Anhydrous	0.148%
CAS: 7681-82-5	Sodium Iodide	0.118%

4 First-aid measures

- **Description of first aid measures**
- **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.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/29/2024

Reviewed on 05/29/2024

Trade name: Anion Mix 1000 ppm Each
Cl,NO₃,PO₄,SO₄,Br,I,CO₃

(Contd. of page 2)

- **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:** No special measures required.
- **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.
- **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: 497-19-8	Sodium Carbonate Anhydrous	7.6 mg/m ³
CAS: 7757-79-1	Potassium Nitrate	9 mg/m ³
CAS: 7757-82-6	Sodium Sulfate Anhydrous	9.8 mg/m ³
CAS: 7647-15-6	Sodium Bromide	12 mg/m ³
CAS: 7681-82-5	Sodium Iodide	13 mg/m ³

· PAC-2:

CAS: 497-19-8	Sodium Carbonate Anhydrous	83 mg/m ³
CAS: 7757-79-1	Potassium Nitrate	100 mg/m ³
CAS: 7757-82-6	Sodium Sulfate Anhydrous	110 mg/m ³
CAS: 7647-15-6	Sodium Bromide	130 mg/m ³
CAS: 7681-82-5	Sodium Iodide	140 mg/m ³

· PAC-3:

CAS: 497-19-8	Sodium Carbonate Anhydrous	500 mg/m ³
CAS: 7757-79-1	Potassium Nitrate	600 mg/m ³
CAS: 7757-82-6	Sodium Sulfate Anhydrous	650 mg/m ³
CAS: 7647-15-6	Sodium Bromide	830 mg/m ³
CAS: 7681-82-5	Sodium Iodide	860 mg/m ³

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Open and handle receptacle with care.
- **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.

(Contd. on page 4)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/29/2024

Reviewed on 05/29/2024

Trade name: Anion Mix 1000 ppm Each
Cl,NO₃,PO₄,SO₄,Br,I,CO₃

· **Specific end use(s)** No further relevant information available.

(Contd. of page 3)

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 product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **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.
 Wash hands before breaks and at the end of work.
 Store protective clothing separately.
- **Breathing equipment:** Not required.
- **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:** Goggles recommended during refilling.
- **Body protection:** Protective work clothing

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Liquid
Color:	Clear water white
- **Odor:** Odorless
- **Odor threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**

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

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/29/2024

Reviewed on 05/29/2024

Trade name: Anion Mix 1000 ppm Each
Cl,NO₃,PO₄,SO₄,Br,I,CO₃

(Contd. of page 4)

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)
· Density at 20 °C (68 °F):	1.00201 g/cm ³ (8.36177 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.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Water:	99.0 %
VOC content:	0.00 %
	0.0 g/l / 0.00 lb/gal
Solids content:	0.9 %
· 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.

* 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.

(Contd. on page 6)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/29/2024

Reviewed on 05/29/2024

Trade name: Anion Mix 1000 ppm Each
Cl,NO₃,PO₄,SO₄,Br,I,CO₃

(Contd. of page 5)

- **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:

- **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.

* 14 Transport information

- | | |
|--|---------------|
| <ul style="list-style-type: none"> · UN-Number · DOT, IMDG, IATA | Not regulated |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT, IMDG, IATA | Not regulated |
| <ul style="list-style-type: none"> · Transport hazard class(es) · DOT, ADN, IMDG, IATA · Class | Not regulated |

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/29/2024

Reviewed on 05/29/2024

Trade name: Anion Mix 1000 ppm Each
Cl,NO₃,PO₄,SO₄,Br,I,CO₃

(Contd. of page 6)

- | | |
|--|-----------------|
| · 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):**

CAS: 7757-79-1 | Potassium Nitrate

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

Water

ACTIVE

Sodium Carbonate Anhydrous

ACTIVE

Sodium Chloride

ACTIVE

Potassium Nitrate

ACTIVE

Sodium Phosphate Dibasic Anhydrous

ACTIVE

Sodium Sulfate Anhydrous

ACTIVE

Sodium Bromide

ACTIVE

Sodium 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.

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/29/2024

Reviewed on 05/29/2024

Trade name: Anion Mix 1000 ppm Each
Cl,NO₃,PO₄,SO₄,Br,I,CO₃

(Contd. of page 7)

· **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

· **Signal word** Warning

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

Sodium Bromide

· **Hazard statements**

Suspected of damaging fertility or the unborn child.

· **Precautionary statements**

Obtain special instructions before use.

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

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

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.

Store locked up.

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:

· **Date of preparation / last revision**

Revision 0.0, 05-29-2024: Creation date for SDS. STN

05/29/2024

· **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

(Contd. on page 9)

US

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/29/2024

Reviewed on 05/29/2024

Trade name: Anion Mix 1000 ppm Each
Cl,NO₃,PO₄,SO₄,Br,I,CO₃

(Contd. of page 8)

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Toxic to Reproduction 2: Reproductive toxicity – Category 2

*** Data compared to the previous version altered.**

US