

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/29/2017

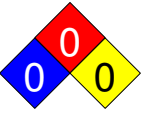
Reviewed on 12/29/2017

1 Identification

- **Product identifier**
- **Trade name:** Mixed Anion
Standard #1
- **Article number:** SPE052
- **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 sherman@aquasolutions.org
- **Emergency telephone number:**
Chemtrec: 800-424-9300
Canutec: 613-996-6666



2 Hazard(s) identification

- **Classification of the substance or mixture**
The product is not classified according to the Globally Harmonized System (GHS).
 - **Label elements**
 - **GHS label elements** Not Applicable
 - **Hazard pictograms** Not Applicable
 - **Signal word** Not Applicable
 - **Hazard statements** Not Applicable
 - **Precautionary statements**
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.
 - **Classification system:**
 - **NFPA ratings (scale 0 - 4)**
- | | |
|---|--|
|  | Health = 0
Fire = 0
Reactivity = 0 |
|---|--|
- **HMIS-ratings (scale 0 - 4)**
- | | | | |
|--|------------|---|----------------|
| <table border="1" data-bbox="224 1577 375 1612"><tr><td>HEALTH</td><td>1</td></tr></table> | HEALTH | 1 | Health = 1 |
| HEALTH | 1 | | |
| <table border="1" data-bbox="224 1612 375 1648"><tr><td>FIRE</td><td>0</td></tr></table> | FIRE | 0 | Fire = 0 |
| FIRE | 0 | | |
| <table border="1" data-bbox="224 1648 375 1684"><tr><td>REACTIVITY</td><td>0</td></tr></table> | REACTIVITY | 0 | Reactivity = 0 |
| REACTIVITY | 0 | | |
- **Other hazards**
 - **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

US

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/29/2017

Reviewed on 12/29/2017

**Trade name: Mixed Anion
Standard #1**

(Contd. of page 1)

3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.
- **Dangerous components:** Not Applicable

· **Table of Nonhazardous Ingredients**

CAS: 7778-80-5	Potassium Sulfate	0.361%
CAS: 7647-14-5	Sodium Chloride	0.328%
CAS: 7631-99-4	Sodium Nitrate	0.302%
CAS: 7632-00-0	Sodium Nitrite	0.0489%
CAS: 7778-77-0	Potassium Phosphate Monobasic	0.0437%
CAS: 7758-02-3	Potassium Bromide	0.037%
CAS: 7681-49-4	Sodium Fluoride	0.022%
CAS: 7732-18-5	Water	98.859%

4 First-aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **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** 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:** 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 item 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.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/29/2017

Reviewed on 12/29/2017

**Trade name: Mixed Anion
Standard #1**

(Contd. of page 2)

· Protective Action Criteria for Chemicals

· PAC-1:

CAS: 7778-80-5	Potassium Sulfate	20 mg/m ³
CAS: 7631-99-4	Sodium Nitrate	4.1 mg/m ³
CAS: 7632-00-0	Sodium Nitrite	6.4 mg/m ³
CAS: 7778-77-0	Potassium Phosphate Monobasic	9.6 mg/m ³
CAS: 7758-02-3	Potassium Bromide	9.2 mg/m ³
CAS: 7681-49-4	Sodium Fluoride	17 mg/m ³

· PAC-2:

CAS: 7778-80-5	Potassium Sulfate	220 mg/m ³
CAS: 7631-99-4	Sodium Nitrate	45 mg/m ³
CAS: 7632-00-0	Sodium Nitrite	71 mg/m ³
CAS: 7778-77-0	Potassium Phosphate Monobasic	110 mg/m ³
CAS: 7758-02-3	Potassium Bromide	100 mg/m ³
CAS: 7681-49-4	Sodium Fluoride	90 mg/m ³

· PAC-3:

CAS: 7778-80-5	Potassium Sulfate	1,300 mg/m ³
CAS: 7631-99-4	Sodium Nitrate	270 mg/m ³
CAS: 7632-00-0	Sodium Nitrite	240 mg/m ³
CAS: 7778-77-0	Potassium Phosphate Monobasic	630 mg/m ³
CAS: 7758-02-3	Potassium Bromide	610 mg/m ³
CAS: 7681-49-4	Sodium Fluoride	1,100 mg/m ³

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **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 item 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.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/29/2017

Reviewed on 12/29/2017

**Trade name: Mixed Anion
Standard #1**

(Contd. of page 3)

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
- **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
- **Odor:** Odorless
- **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 (solid, gaseous):** Not applicable.
- **Ignition temperature:**

Decomposition temperature:	Not determined.
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- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**

Lower:	Not determined.
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(Contd. on page 5)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/29/2017

Reviewed on 12/29/2017

**Trade name: Mixed Anion
Standard #1**

(Contd. of page 4)

Upper:	Not determined.
· Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)
· Density at 20 °C (68 °F):	1.00649 g/cm ³ (8.39916 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Water:	98.9 %
VOC content:	0.00 %
	0.0 g/l / 0.00 lb/gl
· Solids content:	1.1 %
· 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.
 - **on the eye:** No irritating effect.
 - **Sensitization:** No sensitizing effects known.
 - **Additional toxicological information:**
- The product is not subject to classification according to internally approved calculation methods for preparations:
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
- **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

CAS: 7681-49-4 Sodium Fluoride

3

(Contd. on page 6)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/29/2017

Reviewed on 12/29/2017

**Trade name: Mixed Anion
Standard #1**

(Contd. of page 5)

· **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:** *Generally 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:** *Smaller quantities can be disposed of with household waste.*
- **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 | <i>Not regulated</i> |
| · UN proper shipping name | |
| · DOT, ADN, IATA | <i>Not regulated</i> |
| · IMDG | <i>Not Regulated</i> |
| · Transport hazard class(es) | |
| · DOT, ADN, IMDG, IATA | |
| · Class | <i>Not regulated</i> |
| · Packing group | |
| · DOT, IMDG, IATA | <i>Not regulated</i> |
| · Environmental hazards: | |
| · Marine pollutant: | <i>No</i> |
| · Special precautions for user | <i>Not applicable.</i> |

(Contd. on page 7)

Safety Data Sheet

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Reviewed on 12/29/2017

**Trade name: Mixed Anion
Standard #1**

(Contd. of page 6)

- | | |
|--|------------------------|
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | <i>Not applicable.</i> |
| · UN "Model Regulation": | <i>Not regulated</i> |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· Section 355 (extremely hazardous substances):
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<i>None of the ingredients is listed.</i>

· Section 313 (Specific toxic chemical listings):
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CAS: 7632-00-0 Sodium Nitrite

· TSCA (Toxic Substances Control Act):

<i>Potassium Sulfate</i>

<i>Sodium Chloride</i>

<i>Sodium Nitrate</i>

<i>Sodium Nitrite</i>

<i>Potassium Phosphate Monobasic</i>

<i>Potassium Bromide</i>

<i>Sodium Fluoride</i>

<i>Water</i>

· Proposition 65

· Chemicals known to cause cancer:

<i>None of the ingredients is listed.</i>

· Chemicals known to cause reproductive toxicity for females:
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<i>None of the ingredients is listed.</i>

· Chemicals known to cause reproductive toxicity for males:
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<i>None of the ingredients is listed.</i>

· Chemicals known to cause developmental toxicity:

<i>None of the ingredients is listed.</i>

· Carcinogenic categories

· EPA (Environmental Protection Agency)
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<i>None of the ingredients is listed.</i>

· TLV (Threshold Limit Value established by ACGIH)

CAS: 7681-49-4 Sodium Fluoride

A4

· NIOSH-Ca (National Institute for Occupational Safety and Health)

<i>None of the ingredients is listed.</i>

- **GHS label elements** Not Applicable

- **Hazard pictograms** Not Applicable

- **Signal word** Not Applicable

- **Hazard statements** Not Applicable

(Contd. on page 8)

Safety Data Sheet

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**Trade name: Mixed Anion
Standard #1**

(Contd. of page 7)

- **Precautionary statements**

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**

12-29-2017: review SDS for accuracy. STN

Creation date for SDS 02-09-2015. STN

12/29/2017 / -

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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