

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/21/2021

Reviewed on 07/21/2021

1 Identification

- **Product identifier**
- **Trade name:** Salinity Solution
3X Strength
- **Article number:** SPX411
- **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

Repr. 1B H360 May damage 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** *Danger*
- **Hazard statements**
May damage 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)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/21/2021

Reviewed on 07/21/2021

**Trade name: Salinity Solution
3X Strength**

(Contd. of page 1)

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



· **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: 7757-82-6	Sodium Sulfate Anhydrous	1.157%
----------------	--------------------------	--------

· **Table of Nonhazardous Ingredients**

CAS: 7732-18-5	Water	88.017%
CAS: 7647-14-5	Sodium Chloride	6.945%
CAS: 7791-18-6	Magnesium Chloride Hexahydrate	3.141%
CAS: 10035-04-8	Calcium Chloride Dihydrate	0.436%
CAS: 7447-40-7	Potassium Chloride	0.195%
CAS: 144-55-8	Sodium Bicarbonate	0.057%
CAS: 7758-02-3	Potassium Bromide	0.028%
CAS: 10025-70-4	Strontium Chloride Hexahydrate	0.011%
CAS: 10043-35-3	Boric Acid	0.011%
CAS: 7681-49-4	Sodium Fluoride	0.001%

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.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/21/2021

Reviewed on 07/21/2021

Trade name: Salinity Solution
3X Strength

(Contd. of page 2)

- **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.
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).
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.
- **Protective Action Criteria for Chemicals**

· PAC-1:

CAS: 7791-18-6	Magnesium Chloride Hexahydrate	34 mg/m ³
CAS: 7757-82-6	Sodium Sulfate Anhydrous	9.8 mg/m ³
CAS: 10035-04-8	Calcium Chloride Dihydrate	16 mg/m ³
CAS: 144-55-8	Sodium Bicarbonate	13 mg/m ³
CAS: 7758-02-3	Potassium Bromide	9.2 mg/m ³
CAS: 10043-35-3	Boric Acid	6 mg/m ³
CAS: 7681-49-4	Sodium Fluoride	17 mg/m ³

· PAC-2:

CAS: 7791-18-6	Magnesium Chloride Hexahydrate	370 mg/m ³
CAS: 7757-82-6	Sodium Sulfate Anhydrous	110 mg/m ³
CAS: 10035-04-8	Calcium Chloride Dihydrate	170 mg/m ³
CAS: 144-55-8	Sodium Bicarbonate	140 mg/m ³
CAS: 7758-02-3	Potassium Bromide	100 mg/m ³
CAS: 10043-35-3	Boric Acid	23 mg/m ³
CAS: 7681-49-4	Sodium Fluoride	90 mg/m ³

· PAC-3:

CAS: 7791-18-6	Magnesium Chloride Hexahydrate	1,600 mg/m ³
CAS: 7757-82-6	Sodium Sulfate Anhydrous	650 mg/m ³
CAS: 10035-04-8	Calcium Chloride Dihydrate	1,100 mg/m ³
CAS: 144-55-8	Sodium Bicarbonate	840 mg/m ³

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/21/2021

Reviewed on 07/21/2021

**Trade name: Salinity Solution
3X Strength**

(Contd. of page 3)

CAS: 7758-02-3	Potassium Bromide	610 mg/m ³
CAS: 10043-35-3	Boric Acid	830 mg/m ³
CAS: 7681-49-4	Sodium Fluoride	1,100 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.
- **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:**

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:**
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.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/21/2021

Reviewed on 07/21/2021

Trade name: Salinity Solution
3X Strength

(Contd. of page 4)

- **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 to slightly turbid

· **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.

· **Decomposition temperature:** Not determined.

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

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

· Explosion limits:

Lower: Not determined.
Upper: Not determined.

· **Vapor pressure:** Not determined.

· **Density at 20 °C (68 °F):** 1.06011 g/cm³ (8.84662 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: 88.0 %
VOC content: 0.00 %
0.0 g/l / 0.00 lb/gal

Solids content: 12.0 %

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/21/2021

Reviewed on 07/21/2021

Trade name: Salinity Solution
3X Strength

(Contd. of page 5)

· **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 shows the following dangers according to internally approved calculation methods for preparations:
- **Carcinogenic categories**

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

CAS: 7681-49-4 Sodium Fluoride

3

· **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.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/21/2021

Reviewed on 07/21/2021

Trade name: *Salinity Solution*
3X Strength

(Contd. of page 6)

· **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, ADN, IMDG, IATA | <i>Not regulated</i> |
| · UN proper shipping name | |
| · DOT, ADN, IMDG, IATA | <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: | <i>Not applicable.</i> |
| · Special precautions for user | <i>Not applicable.</i> |
| · 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**
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 Sulfate Anhydrous	ACTIVE
Potassium Chloride	ACTIVE

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/21/2021

Reviewed on 07/21/2021

Trade name: Salinity Solution
3X Strength

(Contd. of page 7)

Sodium Bicarbonate	ACTIVE
Potassium Bromide	ACTIVE
Boric Acid	ACTIVE
Sodium Fluoride	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)**

CAS: 10043-35-3	Boric Acid	I (oral)
-----------------	------------	----------

· **TLV (Threshold Limit Value)**

CAS: 10043-35-3	Boric Acid	A4
CAS: 7681-49-4	Sodium Fluoride	A4

· **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** Danger

· **Hazard statements**

May damage 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 9)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/21/2021

Reviewed on 07/21/2021

Trade name: Salinity Solution
3X Strength

(Contd. of page 8)

· **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 1.0, 07-13-2021: upodated hazard information. STN

Revision 0.0, 12-13-2016: Creation date for SDS. STN

07/21/2021 / 1.0

· **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

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Repr. 1B: Reproductive toxicity – Category 1B

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

US