

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/16/2024

Reviewed on 08/16/2024

## 1 Identification

- **Product identifier**
- **Trade name:** Sprayberry Field Brine  
Location 514769
- **Article number:** EXX288
- **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**  
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.  
Store in a closed container.  
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)**  

HEALTH	0
FIRE	0
REACTIVITY	0

Health = 0  
Fire = 0  
Reactivity = 0
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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## 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

### · **Dangerous components:**

CAS: 10035-04-8	Calcium Chloride Dihydrate	1.122%
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### · **Table of Nonhazardous Ingredients**

CAS: 7732-18-5	Water	87.821%
CAS: 7647-14-5	Sodium Chloride	9.166%
CAS: 7447-41-8	Lithium Chloride	0.954%
CAS: 7791-18-6	Magnesium Chloride Hexahydrate	0.472%
CAS: 10042-76-9	Strontium Nitrate	0.142%
CAS: 7447-40-7	Potassium Chloride	0.089%
CAS: 7757-82-6	Sodium Sulfate Anhydrous	0.087%
CAS: 7647-15-6	Sodium Bromide	0.062%
CAS: 144-55-8	Sodium Bicarbonate	0.041%
CAS: 10043-35-3	boric acid	0.031%
CAS: 10213-79-3	disodium silicate pentahydrate	0.01%
CAS: 10025-77-1	Ferric Chloride Hexahydrate	0.001%
CAS: 10326-27-9	Barium Chloride Dihydrate	0.001%
CAS: 10034-96-5	Manganese Sulfate Monohydrate	0.0003%

## 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.

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## 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 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: 10035-04-8	Calcium Chloride Dihydrate	16 mg/m <sup>3</sup>
CAS: 7447-41-8	Lithium Chloride	2.3 mg/m <sup>3</sup>
CAS: 7791-18-6	Magnesium Chloride Hexahydrate	34 mg/m <sup>3</sup>
CAS: 10042-76-9	Strontium Nitrate	5.7 mg/m <sup>3</sup>
CAS: 7757-82-6	Sodium Sulfate Anhydrous	9.8 mg/m <sup>3</sup>
CAS: 7647-15-6	Sodium Bromide	12 mg/m <sup>3</sup>
CAS: 144-55-8	Sodium Bicarbonate	13 mg/m <sup>3</sup>
CAS: 10043-35-3	boric acid	6 mg/m <sup>3</sup>
CAS: 10213-79-3	disodium silicate pentahydrate	6.6 mg/m <sup>3</sup>
CAS: 10025-77-1	Ferric Chloride Hexahydrate	15 mg/m <sup>3</sup>
CAS: 10326-27-9	Barium Chloride Dihydrate	2.7 mg/m <sup>3</sup>
CAS: 10034-96-5	Manganese Sulfate Monohydrate	9.2 mg/m <sup>3</sup>

### · PAC-2:

CAS: 10035-04-8	Calcium Chloride Dihydrate	170 mg/m <sup>3</sup>
CAS: 7447-41-8	Lithium Chloride	17 mg/m <sup>3</sup>
CAS: 7791-18-6	Magnesium Chloride Hexahydrate	370 mg/m <sup>3</sup>
CAS: 10042-76-9	Strontium Nitrate	62 mg/m <sup>3</sup>
CAS: 7757-82-6	Sodium Sulfate Anhydrous	110 mg/m <sup>3</sup>
CAS: 7647-15-6	Sodium Bromide	130 mg/m <sup>3</sup>
CAS: 144-55-8	Sodium Bicarbonate	140 mg/m <sup>3</sup>
CAS: 10043-35-3	boric acid	23 mg/m <sup>3</sup>
CAS: 10213-79-3	disodium silicate pentahydrate	73 mg/m <sup>3</sup>
CAS: 10025-77-1	Ferric Chloride Hexahydrate	39 mg/m <sup>3</sup>
CAS: 10326-27-9	Barium Chloride Dihydrate	330 mg/m <sup>3</sup>
CAS: 10034-96-5	Manganese Sulfate Monohydrate	15 mg/m <sup>3</sup>

### · PAC-3:

CAS: 10035-04-8	Calcium Chloride Dihydrate	1,100 mg/m <sup>3</sup>
CAS: 7447-41-8	Lithium Chloride	100 mg/m <sup>3</sup>
CAS: 7791-18-6	Magnesium Chloride Hexahydrate	1,600 mg/m <sup>3</sup>

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CAS: 10042-76-9	Strontium Nitrate	370 mg/m <sup>3</sup>
CAS: 7757-82-6	Sodium Sulfate Anhydrous	650 mg/m <sup>3</sup>
CAS: 7647-15-6	Sodium Bromide	830 mg/m <sup>3</sup>
CAS: 144-55-8	Sodium Bicarbonate	840 mg/m <sup>3</sup>
CAS: 10043-35-3	boric acid	830 mg/m <sup>3</sup>
CAS: 10213-79-3	disodium silicate pentahydrate	440 mg/m <sup>3</sup>
CAS: 10025-77-1	Ferric Chloride Hexahydrate	240 mg/m <sup>3</sup>
CAS: 10326-27-9	Barium Chloride Dihydrate	2,000 mg/m <sup>3</sup>
CAS: 10034-96-5	Manganese Sulfate Monohydrate	90 mg/m <sup>3</sup>

## 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:** 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 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:**  
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.

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- **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.

· **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 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:	87.8 %
VOC content:	0.00 %
	0.0 g/l / 0.00 lb/gal

**Solids content:** 12.2 %

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· **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:**

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

**ATE (Acute Toxicity Estimate)**

Oral	LD50	89,103 mg/kg (rat)
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- **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)**

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.

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- **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:** 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

- |                                                                                  |                 |
|----------------------------------------------------------------------------------|-----------------|
| · <b>UN-Number</b>                                                               |                 |
| · <b>DOT, IMDG, IATA</b>                                                         | Not regulated   |
| · <b>UN proper shipping name</b>                                                 |                 |
| · <b>DOT, IATA</b>                                                               | Not regulated   |
| · <b>IMDG</b>                                                                    | Not Regulated   |
|                                                                                  | 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.*

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· **Section 313 (Specific toxic chemical listings):**

CAS: 10042-76-9	Strontium Nitrate
CAS: 10326-27-9	Barium Chloride Dihydrate
CAS: 10034-96-5	Manganese Sulfate Monohydrate

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

Water	ACTIVE
Sodium Chloride	ACTIVE
Lithium Chloride	ACTIVE
Strontium Nitrate	ACTIVE
Potassium Chloride	ACTIVE
Sodium Sulfate Anhydrous	ACTIVE
Sodium Bromide	ACTIVE
Sodium Bicarbonate	ACTIVE
boric acid	ACTIVE

· **Hazardous Air Pollutants**

CAS: 10034-96-5	Manganese Sulfate Monohydrate
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· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.
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· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.
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· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.
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· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.
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· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

CAS: 10043-35-3	boric acid	I (oral)
CAS: 10326-27-9	Barium Chloride Dihydrate	D, CBD(inh), NL(oral)
CAS: 10034-96-5	Manganese Sulfate Monohydrate	D

· **TLV (Threshold Limit Value)**

CAS: 10043-35-3	boric acid	A4
CAS: 10326-27-9	Barium Chloride Dihydrate	A4

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

None of the ingredients is listed.
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· **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.

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*Store in a closed container.*

*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, 08-16-2024: Creation date for SDS. CMC/STN*

*08/16/2024 / -*

· **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)*

*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*

US