Printing date 12/28/2017 Reviewed on 12/28/2017

### 1 Identification

· Product identifier

· Trade name: Sea Salt, Synthetic ASTM D-1141

· Article number: S9795

· 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

Wear protective gloves / eye 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 in accordance with local/regional/national/international regulations.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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



Health = 0 Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.

(Contd. on page 2)

Printing date 12/28/2017 Reviewed on 12/28/2017

Trade name: Sea Salt, Synthetic ASTM D-1141

(Contd. of page 1)

· vPvB: Not applicable.

#### 3 Composition/information on ingredients

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

| · Dangerous components: |                                     |         |  |
|-------------------------|-------------------------------------|---------|--|
| CAS: 10043-52-4         | Calcium Chloride                    | 2.765%  |  |
| · Table of Nonhaza      | · Table of Nonhazardous Ingredients |         |  |
| CAS: 7647-14-5          | Sodium Chloride                     | 58.492% |  |
| CAS: 7791-18-6          | Magnesium Chloride Hexahydrate      | 26.46%  |  |
| CAS: 7757-82-6          | Sodium Sulfate Anhydrous            | 9.75%   |  |
| CAS: 7447-40-7          | Potassium Chloride                  | 1.645%  |  |
| CAS: 144-55-8           | Sodium Bicarbonate                  | 0.477%  |  |
| CAS: 7758-02-3          | Potassium Bromide                   | 0.238%  |  |
| CAS: 10025-70-4         | Strontium Chloride Hexahydrate      | 0.095%  |  |
| CAS: 10043-35-3         | Boric Acid                          | 0.071%  |  |
| CAS: 7681-49-4          | Sodium Fluoride                     | 0.007%  |  |

### 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: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:
- Dispose contaminated material as waste according to item 13.

(Contd. on page 3)

Printing date 12/28/2017 Reviewed on 12/28/2017

Trade name: Sea Salt, Synthetic ASTM D-1141

(Contd. of page 2)

#### · 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/m³             |
| CAS: 7757-82-6  | Sodium Sulfate Anhydrous       | 9.8 mg/m             |
| CAS: 10043-52-4 | Calcium Chloride               | 12 mg/m <sup>3</sup> |
| CAS: 144-55-8   | Sodium Bicarbonate             | 13 mg/m <sup>3</sup> |
| CAS: 7758-02-3  | Potassium Bromide              | 9.2 mg/m             |
| CAS: 10043-35-3 | Boric Acid                     | 6 mg/m <sup>3</sup>  |
| CAS: 7681-49-4  | Sodium Fluoride                | 17 mg/m <sup>3</sup> |
| PAC-2:          |                                |                      |
| CAS: 7791-18-6  | Magnesium Chloride Hexahydrate | 370 mg/m             |
| CAS: 7757-82-6  | Sodium Sulfate Anhydrous       | 110 mg/m             |
| CAS: 10043-52-4 | Calcium Chloride               | 130 mg/m             |
| CAS: 144-55-8   | Sodium Bicarbonate             | 140 mg/m             |
| CAS: 7758-02-3  | Potassium Bromide              | 100 mg/m             |
| CAS: 10043-35-3 | Boric Acid                     | 23 mg/m³             |
| CAS: 7681-49-4  | Sodium Fluoride                | 90 mg/m³             |
| PAC-3:          |                                |                      |
| CAS: 7791-18-6  | Magnesium Chloride Hexahydrate | 1,600 mg/m           |
| CAS: 7757-82-6  | Sodium Sulfate Anhydrous       | 650 mg/m³            |
| CAS: 10043-52-4 | Calcium Chloride               | 790 mg/m³            |
| CAS: 144-55-8   | Sodium Bicarbonate             | 840 mg/m³            |
| CAS: 7758-02-3  | Potassium Bromide              | 610 mg/m³            |
| CAS: 10043-35-3 | Boric Acid                     | 830 mg/m³            |
| CAS: 7681-49-4  | Sodium Fluoride                | 1,100 mg/m           |
|                 |                                |                      |

### 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.

Printing date 12/28/2017 Reviewed on 12/28/2017

Trade name: Sea Salt, Synthetic ASTM D-1141

(Contd. of page 3)

### 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.
- · 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: Not required.
- · **Body protection:** Protective work clothing

#### 9 Physical and chemical properties

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

Form: Powder
Color: White

Odor: Odor threshold: Not determined.

· pH-value: Not applicable.

· Change in condition

Melting point/Melting range:

Boiling point/Boiling range:

Undetermined.

Undetermined.

· Flash point: Not applicable.

· Flammability (solid, gaseous): Not determined.

(Contd. on page 5)

Printing date 12/28/2017 Reviewed on 12/28/2017

Trade name: Sea Salt, Synthetic ASTM D-1141

|                                     | (Contd. o                                     | f page |
|-------------------------------------|-----------------------------------------------|--------|
| Ignition temperature:               |                                               |        |
| 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 applicable.                               |        |
| Density at 20 °C (68 °F):           | 1.95657 g/cm³ (16.32758 lbs/gal)              |        |
| · Relative density                  | Not determined.                               |        |
| · Vapor density                     | Not applicable.                               |        |
| Evaporation rate                    | Not applicable.                               |        |
| Solubility in / Miscibility with    |                                               |        |
| Water:                              | Insoluble.                                    |        |
| Partition coefficient (n-octanol/wa | ter): Not determined.                         |        |
| Viscosity:                          |                                               |        |
| Dynamic:                            | Not applicable.                               |        |
| Kinematic:                          | Not applicable.                               |        |
| Solvent content:                    |                                               |        |
| VOC content:                        | 0.00 %                                        |        |
|                                     | 0.0 g/l / 0.00 lb/gl                          |        |
| Solids content:                     | 100.0 %                                       |        |
| 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 5,264 mg/kg (rat)

- Primary irritant effect:
- · on the skin: No irritant effect.

(Contd. on page 6)

Printing date 12/28/2017 Reviewed on 12/28/2017

Trade name: Sea Salt, Synthetic ASTM D-1141

(Contd. of page 5)

- · 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

· 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: Smaller quantities can be disposed of with household waste.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

| 14 Transport in | format | tion |
|-----------------|--------|------|
|-----------------|--------|------|

| · UN-Numb |
|-----------|
|-----------|

· DOT, ADN, IMDG, IATA Not regulated

· UN proper shipping name

· DOT, ADN, IATA Not regulated
· IMDG Not Regulated

(Contd. on page 7)

Printing date 12/28/2017 Reviewed on 12/28/2017

Trade name: Sea Salt, Synthetic
ASTM D-1141

|                                                                              | (Contd. of page |
|------------------------------------------------------------------------------|-----------------|
| · Transport hazard class(es)                                                 |                 |
| · DOT, ADN, IMDG, IATA<br>· Class                                            | Not regulated   |
| · Packing group<br>· DOT, IMDG, IATA                                         | Not regulated   |
| · Environmental hazards:                                                     | Not applicable. |
| · Special precautions for user                                               | Not applicable. |
| · Transport in bulk according to Annex II of<br>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
- · 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):

Sodium Chloride

Sodium Sulfate Anhydrous

Calcium Chloride

Potassium Chloride

Sodium Bicarbonate

Potassium Bromide

Boric Acid

Sodium Fluoride

- · TSCA new (21st Century Act) (Substances not 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)

(Contd. on page 8)

Printing date 12/28/2017 Reviewed on 12/28/2017

Trade name: Sea Salt, Synthetic
ASTM D-1141

(Contd. of page 7)

# · TLV (Threshold Limit Value established by ACGIH) 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 Not Applicable
- · Hazard pictograms Not Applicable
- Signal word Not Applicable
  Hazard statements Not Applicable
- · Precautionary statements

Wear protective gloves / eye 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 in accordance with local/regional/national/international regulations.

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

12-28-2017: review SDS for accuracy. STN

Creation date for SDS 11-19-2015. STN

12/28/2017 / -

### · 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)

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

IIS