Printing date 07/05/2023

Reviewed on 07/05/2023

1 Identification

- · Product identifier
- · Trade name: Fluoride Standard 50.0 ppm w/v Certified Solution
- Article number: 3854
- · 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
- 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)



· HMIS-ratings (scale 0 - 4)

| HEALTH | 1 | Health = 1 |
|------------|---|----------------|
| FIRE | 0 | Fire = 0 |
| REACTIVITY | 0 | Reactivity = 0 |

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

(Contd. on page 2)



Printing date 07/05/2023

Reviewed on 07/05/2023

Trade name: Fluoride Standard 50.0 ppm w/v Certified Solution

(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: 7732-18-5 | Water | 99.989% | |
| CAS: 7681-49-4 | Sodium Fluoride | 0.011% | |

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 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: 7681-49-4 Sodium Fluoride

17 mg/m³

· PAC-2:

CAS: 7681-49-4 Sodium Fluoride

90 mg/m³ (Contd. on page 3)

US -

Printing date 07/05/2023

Reviewed on 07/05/2023

Trade name: Fluoride Standard 50.0 ppm w/v Certified Solution

(Contd. of page 2)

 $1,100 \text{ mg/m}^3$

• PAC-3:

CAS: 7681-49-4 Sodium Fluoride

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 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 \cdot **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.

(Contd. on page 4)

Printing date 07/05/2023

*

Reviewed on 07/05/2023

Trade name: Fluoride Standard 50.0 ppm w/v Certified Solution

· Body protection: Protective work clothing

(Contd. of page 3)

| Information on basic physical and c | chemical properties | |
|---|---|--|
| General Information | nemicui properties | |
| Appearance: | | |
| Form: | Liquid | |
| Color: | Clear | |
| Odor: | Odorless | |
| Odor threshold: | Not determined. | |
| pH-value: | Not determined. | |
| Change in condition | | |
| Melting point/Melting range: | 0 °C (32 °F) | |
| 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 $^{\circ}C$ (68 $^{\circ}F$): | 23 hPa (17.3 mm Hg) | |
| <i>Density at 20 °C (68 °F):</i> | 1.00007 g/cm ³ (8.34558 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/wate | er): Not determined. | |
| Viscosity: | | |
| Dynamic: | Not determined. | |
| Kinematic: | Not determined. | |
| Solvent content: | | |
| Water: | 100.0 % | |
| VOC content: | | |
| | 0.0 g/l / 0.00 lb/gal | |
| Solids content: | 0.0 % | |
| Other information | No further relevant information available. | |

(Contd. on page 5)

Printing date 07/05/2023

Reviewed on 07/05/2023

Trade name: Fluoride Standard 50.0 ppm w/v Certified Solution

(Contd. of page 4)

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

· 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.

(Contd. on page 6)

3

Printing date 07/05/2023

Reviewed on 07/05/2023

Trade name: Fluoride Standard 50.0 ppm w/v Certified Solution

(Contd. of page 5)

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.

| Transport information | |
|---------------------------------------|-----------------|
| · UN-Number | |
| DOT, ADN, IMDG, IATA | Not regulated |
| · UN proper shipping name | |
| · DOT, ADN, IATA | Not regulated |
| · IMDG | Not Regulated |
| | Not regulated |
| • Transport hazard class(es) | |
| DOT, ADN, IMDG, IATA | |
| · Class | Not regulated |
| · Packing group | |
| DOT, IMDG, IATA | Not regulated |
| Environmental hazards: | |
| Marine pollutant: | No |
| • Special precautions for user | Not applicable. |
| · Transport in bulk according to Anne | x II of |
| MARPOL73/78 and the IBC Code | Not applicable. |
| Transport/Additional information: | |
| DOT | |
| Remarks: | Not regulated |
| · IMDG | |
| Remarks: | Not regulated |
| · IATA | |
| Remarks: | Not regulated |
| · 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.

(Contd. on page 7)

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Printing date 07/05/2023

Reviewed on 07/05/2023

Trade name: Fluoride Standard 50.0 ppm w/v Certified Solution

| | (Contd. of page |
|--|------------------------------------|
| Section 313 (Specific toxic chemical listings): | |
| None of the ingredients is listed. | |
| TSCA (Toxic Substances Control Act): | |
| Water | ACTIVI |
| Sodium Fluoride | ACTIVI |
| 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. | |
| TLV (Threshold Limit Value) | |
| CAS: 7681-49-4 Sodium Fluoride | A |
| 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 | |
| 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 contac | t lenses, if present and easy to a |
| Continue rinsing. | |
| Dispose of contents/container in accordance with local/regional/national/inter | mational negulations |

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
- *Revision 1.1 07-05-2023: Reviewed SDS for Accuracy. STN Revision 0.0, 06-29-2023: Creation date for SDS. STN 07/05/2023*

(Contd. on page 8)

US

Printing date 07/05/2023

Reviewed on 07/05/2023

Trade name: Fluoride Standard 50.0 ppm w/v Certified Solution

(Contd. of page 7)

• 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 • * Data compared to the previous version altered.

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