Printing date 07/31/2019

Reviewed on 07/31/2019

1 Identification

- · Product identifier
- Trade name: <u>Fluoride Standard</u> <u>1000 ug/ml (ppm) as F</u>
- · Article number: OLI054
- 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*

AQUA

• *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)



· HMIS-ratings (scale 0 - 4)

HEALTHImage: OHealth = 0FIREImage: OFire = 0REACTIVITYImage: OReactivity = 0

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

(Contd. on page 2)

Printing date 07/31/2019

Reviewed on 07/31/2019

Trade name: Fluoride Standard 1000 ug/ml (ppm) as F

(Contd. of page 1)

0.221%

99.779%

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: 7681-49-4 Sodium Fluoride
- CAS: 7732-18-5 Water

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: No special measures required.
- *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: 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 07/31/2019

Reviewed on 07/31/2019

(Contd. of page 2)

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

Trade name: Fluoride Standard 1000 ug/ml (ppm) as F

· 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: 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:
- 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 07/31/2019

Reviewed on 07/31/2019

(Contd. of page 3)

Trade name: Fluoride Standard 1000 ug/ml (ppm) as F

· Body protection: Protective work clothing

Information on basic physical and c	chemical properties	
General Information		
Appearance:		
Form:	Liquid	
Color:	Colorless	
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.	
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 at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	
<i>Density at 20 °C (68 °F):</i>	1.00396 g/cm ³ (8.37805 lbs/gal)	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
Partition coefficient (n-octanol/wate	er): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Water:	99.8 %	
VOC content:	0.00 %	
	0.0 g/l / 0.00 lb/gal	
Solids content:	0.2 %	
Other information	No further relevant information available.	

(Contd. on page 5)

Printing date 07/31/2019

Reviewed on 07/31/2019

Trade name: Fluoride Standard 1000 ug/ml (ppm) as F

(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:

· LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Oral LD50 23,529 mg/kg (rat)

- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- \cdot 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.
- \cdot **Mobility in soil** No further relevant information available.
- \cdot Additional ecological information:
- General notes: Not hazardous for water.
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 6)

3

Printing date 07/31/2019

Trade name: Fluoride Standard 1000 ug/ml (ppm) as F

• 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.

UN-Number		
DOT, IMDG, IATA	Not regulated	
UN proper shipping name		
DOT, 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:	Not applicable.	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex	II of	
MARPOL73/78 and the IBC Code	Not applicable.	

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot 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 Fluoride	ACTIV
Water	ACTIVI
· Hazardous Air Pollutants	
None of the ingredients is listed.	
	(Contd. on page

(Contd. of page 5)

Reviewed on 07/31/2019

Printing date 07/31/2019

· Proposition 65

Reviewed on 07/31/2019

Trade name: Fluoride Standard

1000 ug/ml (ppm) as F

(Contd. of page 6)

A4

· 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 established by ACGIH)

CAS: 7681-49-4 Sodium Fluoride

·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 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.

• 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:

 \cdot Date of preparation / last revision

Revsion 0.0, 07-31-2019, Creation date for SDS. STN 07/31/2019 / -

• Abbreviations and acronyms:

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

Printing date 07/31/2019

Trade name: Fluoride Standard 1000 ug/ml (ppm) as F

Reviewed on 07/31/2019

(Contd. of page 7)

US

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