acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: October 25, 2018 Revision: October 25, 2018

1 Identification

· Product identifier

· Trade name: Fluoride Standard as F, 100 mg

· Product code: FS3100SS

· Recommended use and restriction on use

· Recommended use: Laboratory chemicals

· Restrictions on use: No relevant information available.

Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier:

AquaPhoenix Scientific, Inc.

860 Gitts Run Road Hanover, PA 17331 Phone: (717)632-1291 Toll-Free: (866)632-1291 info@aquaphoenixsci.com

· Emergency telephone number:

ChemTel Inc.

(800)255-3924 (North America) +1 (813)248-0585 (International)

2 Hazard(s) identification

· Classification of the substance or mixture

The product is not classified as hazardous according to the Globally Harmonized System (GHS).

· Label elements

The product is not classified as hazardous according to OSHA GHS regulations within the United States.

- · GHS label elements This product does not have a classification according to the GHS regulation.
- · Hazard pictograms: Not regulated.
- · Signal word: Not regulated.
- · Hazard statements: Not regulated.
- · Precautionary statements: Not regulated.
- · Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Components:				
7732-18-5	Water		99.779%	
7681-49-4	sodium fluoride	Acute Tox. 3, H301 Skin Irrit. 2, H315; Eye Irrit. 2A, H319	0.221%	

Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

(Cont'd. on page 2)

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: October 25, 2018 Revision: October 25, 2018

Trade name: Fluoride Standard as F, 100 mg

(Cont'd. of page 1)

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:

Rinse with warm water.

If skin irritation is experienced, consult a doctor.

· After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting. Seek medical attention.

· Most important symptoms and effects, both acute and delayed:

May cause gastro-intestinal irritation if ingested.

Nausea in case of ingestion.

- · Danger: No relevant information available.
- · Indication of any immediate medical attention and special treatment needed:

If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · For safety reasons unsuitable extinguishing agents: No relevant information available.
- · Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

· Environmental precautions

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of the collected material according to regulations.

· 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.

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: October 25, 2018 Revision: October 25, 2018

Trade name: Fluoride Standard as F, 100 mg

(Cont'd. of page 2)

7 Handling and storage

- · Handling
- · Precautions for safe handling: Avoid splashes or spray in enclosed areas.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with acids.

- · Further information about storage conditions: Keep containers tightly sealed.
- · Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

- · 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.

- · Exposure controls
- · Engineering measures No special measures required.
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

- Engineering controls: Provide adequate ventilation.
- Breathing equipment: Not required under normal conditions of use.
- · Protection of hands: Not required under normal conditions of use.
- · Eye protection:



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- · Body protection: Not required under normal conditions of use.
- · Limitation and supervision of exposure into the environment No special requirements.
- · Risk management measures No special requirements.

9 Physical and chemical properties

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

Form: Liquid
Color: Colorless
Odor: Odorless

(Cont'd. on page 4)

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: October 25, 2018 Revision: October 25, 2018

Trade name: Fluoride Standard as F, 100 mg

Odor threshold: PH-value: Not determined. PH-value: Not determined. Not determined. Not determined. Not determined. Not determined. Po °C (32 °F) Flash point: The product is not flammable. Flammability (solid, gaseous): Not applicable. Auto-ignition temperature: Not determined. Decomposition temperature: Not determined. Danger of explosion: Product does not present an explosion hazard. Explosion limits Lower: Upper: Not determined. Oxidizing properties: Not determined. Vapor pressure: Not determined. Density at 20 °C (68 °F): Relative density: Vapor density: Vapor density: Vapor density: Not determined. Solubility in / Miscibility with Water: Fully miscible. Partition coefficient (n-octanol/water): Not determined. Viscosity Dynamic: Kinematic: Not determined. No relevant information available.			
pH-value: Melting point/Melting range: Boiling point/Boiling range: Boiling point/Boiling range: The product is not flammable. Flash point: The product is not flammable. Flammability (solid, gaseous): Not applicable. Auto-ignition temperature: Not determined. Decomposition temperature: Not determined. Danger of explosion: Product does not present an explosion hazard. Explosion limits Lower: Upper: Not determined. Oxidizing properties: Not determined. Vapor pressure: Not determined. Density at 20 °C (68 °F): 1 g/cm³ (8.35 lbs/gal) Relative density: Not determined. Partition rate: Not determined. Solubility in / Miscibility with Water: Fully miscible. Partition coefficient (n-octanol/water): Not determined. Viscosity Dynamic: Not determined. Not determined.			(Cont'd. of page 3)
Melting point/Melting range: Boiling point/Boiling range: 100-102 °C (212-215.6 °F) Flash point: The product is not flammable. Flammability (solid, gaseous): Not applicable. Auto-ignition temperature: Not determined. Decomposition temperature: Not determined. Danger of explosion: Product does not present an explosion hazard. Explosion limits Lower: Upper: Not determined. Vapor pressure: Not determined. Density at 20 °C (68 °F): Relative density: Vapor density: Vot determined. Solubility in / Miscibility with Water: Fully miscible. Partition coefficient (n-octanol/water): Not determined. Viscosity Dynamic: Kinematic: Not determined.	· Odor threshold:	Not determined.	
Boiling point/Boiling range: 100-102 °C (212-215.6 °F) Flash point: The product is not flammable. Flammability (solid, gaseous): Not applicable. Auto-ignition temperature: Not determined. Decomposition temperature: Not determined. Danger of explosion: Product does not present an explosion hazard. Explosion limits Lower: Not determined. Upper: Not determined. Oxidizing properties: Not determined. Vapor pressure: Not determined. Density at 20 °C (68 °F): 1 g/cm³ (8.35 lbs/gal) Relative density: Not determined. Vapor density: Not determined. Solubility in / Miscibility with Water: Fully miscible. Partition coefficient (n-octanol/water): Not determined. Viscosity Dynamic: Not determined. Not determined. Not determined.	· pH-value:	Not determined.	
Flash point: Flammability (solid, gaseous): Not applicable. Auto-ignition temperature: Not determined. Decomposition temperature: Not determined. Danger of explosion: Product does not present an explosion hazard. Explosion limits Lower: Not determined. Upper: Not determined. Oxidizing properties: Not determined. Vapor pressure: Not determined. Density at 20 °C (68 °F): Relative density: Vapor density: Vapor density: Not determined. Solubility in / Miscibility with Water: Partition coefficient (n-octanol/water): Not determined. Viscosity Dynamic: Kinematic: Not determined. Not determined. Not determined.	· Melting point/Melting range:	0 °C (32 °F)	
Flammability (solid, gaseous): Not applicable. Auto-ignition temperature: Not determined. Decomposition temperature: Not determined. Danger of explosion: Product does not present an explosion hazard. Explosion limits Lower: Upper: Not determined. Oxidizing properties: Not determined. Vapor pressure: Not determined. Density at 20 °C (68 °F): Relative density: Vapor density: Vapor density: Vapor density: Not determined. Solubility in / Miscibility with Water: Partition coefficient (n-octanol/water): Not determined. Viscosity Dynamic: Kinematic: Not determined. Not determined.	· Boiling point/Boiling range:	100-102 °C (212-215.6 °F)	
Auto-ignition temperature: Not determined. Decomposition temperature: Not determined. Danger of explosion: Product does not present an explosion hazard. Explosion limits Lower: Not determined. Upper: Not determined. Oxidizing properties: Not determined. Vapor pressure: Not determined. Density at 20 °C (68 °F): 1 g/cm³ (8.35 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.	· Flash point:	The product is not flammable.	
Decomposition temperature: Danger of explosion: Product does not present an explosion hazard. Explosion limits Lower: Upper: Not determined. Oxidizing properties: Not determined. Vapor pressure: Not determined. Density at 20 °C (68 °F): Relative density: Vapor density: Vapor density: Vapor ate: Not determined. Solubility in / Miscibility with Water: Fully miscible. Partition coefficient (n-octanol/water): Not determined. Viscosity Dynamic: Kinematic: Not determined. Not determined. Not determined.	· Flammability (solid, gaseous):	Not applicable.	
Danger of explosion: Product does not present an explosion hazard. Explosion limits Lower: Upper: Not determined. Oxidizing properties: Not determined. Vapor pressure: Not determined. Density at 20 °C (68 °F): 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: Kinematic: Not determined. Not determined. Not determined.	· Auto-ignition temperature:	Not determined.	
Explosion limits Lower: Not determined. Upper: Not determined. Oxidizing properties: Not determined. Vapor pressure: Not determined. Density at 20 °C (68 °F): 1 g/cm³ (8.35 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.	· Decomposition temperature:	Not determined.	
Lower: Upper: Not determined. Oxidizing properties: Not determined. Vapor pressure: Not determined. Density at 20 °C (68 °F): Relative density: Not determined. Vapor 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: Kinematic: Not determined. Not determined.	· Danger of explosion:	Product does not present an explosion hazard.	
Upper: Not determined. Oxidizing properties: Not determined. Vapor pressure: Not determined. Density at 20 °C (68 °F): 1 g/cm³ (8.35 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.	· Explosion limits		
Oxidizing properties: Not determined. Vapor pressure: Not determined. Density at 20 °C (68 °F): 1 g/cm³ (8.35 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.	Lower:	Not determined.	
Vapor pressure: Not determined. Density at 20 °C (68 °F): 1 g/cm³ (8.35 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.		Not determined.	
Density at 20 °C (68 °F): 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.	· Oxidizing properties:	Not determined.	
 Relative density: Vapor density: Not determined. Evaporation rate: Solubility in / Miscibility with Water: Fully miscible. Partition coefficient (n-octanol/water): Not determined. Viscosity Dynamic: Not determined. Kinematic: Not determined. 	· Vapor pressure:	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. 	· Density at 20 °C (68 °F):	1 g/cm³ (8.35 lbs/gal)	
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.	1	Not determined.	
Solubility in / Miscibility with Water: Fully miscible. Partition coefficient (n-octanol/water): Not determined. Viscosity Dynamic: Not determined. Kinematic: Not determined.		Not determined.	
Water: Fully miscible. Partition coefficient (n-octanol/water): Not determined. Viscosity Dynamic: Not determined. Kinematic: Not determined.	· Evaporation rate:	Not determined.	
Partition coefficient (n-octanol/water): Not determined. Viscosity Dynamic: Not determined. Kinematic: Not determined.	· Solubility in / Miscibility with		
Viscosity Dynamic: Not determined. Kinematic: Not determined.	Water:	Fully miscible.	
Dynamic: Not determined. Kinematic: Not determined.	· Partition coefficient (n-octanol/water): Not determined.		
Kinematic: Not determined.	· Viscosity		
	Dynamic:	Not determined.	
· Other information No relevant information available.	Kinematic:	Not determined.	
	· Other information	No relevant information available.	

10 Stability and reactivity

- · Reactivity: No relevant information available.
- · Chemical stability: Stable under normal temperatures and pressures.
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Possibility of hazardous reactions

Toxic fumes may be released if heated above the decomposition point.

- · Conditions to avoid Excessive heat.
- · Incompatible materials Strong acids
- Hazardous decomposition products

Under fire conditions only:

Corrosive gases/vapors

Page: 5/8

Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: October 25, 2018 Revision: October 25, 2018

Trade name: Fluoride Standard as F, 100 mg

(Cont'd. of page 4)

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:

7681-49-4 sodium fluoride

Oral LD50 52 mg/kg (rat)

- Primary irritant effect:
- · On the skin: Based on available data, the classification criteria are not met.
- · On the eye: Based on available data, the classification criteria are not met.
- · Sensitization: Based on available data, the classification criteria are not met.

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable route(s) of exposure:

Ingestion.

Inhalation.

Eye contact.

Skin contact.

- · Acute effects (acute toxicity, irritation and corrosivity): No relevant information available.
- · Repeated dose toxicity: No relevant information available.
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- · Carcinogenicity: Based on available data, the classification criteria are not met.
- · Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT-single exposure: Based on available data, the classification criteria are not met.
- · STOT-repeated exposure: Based on available data, the classification criteria are not met.
- · Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

- Toxicity
- · Aquatic toxicity No relevant information available.
- · Persistence and degradability No relevant information available.
- · Bioaccumulative potential: No relevant information available.
- · Mobility in soil: No 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 relevant information available.

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: October 25, 2018 Revision: October 25, 2018

Trade name: Fluoride Standard as F, 100 mg

(Cont'd. of page 5)

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Smaller quantities can be disposed of with household waste.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

- · 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, ADR, IMDG, IATA	Not regulated.		
· UN proper shipping name · DOT, ADR, IMDG, IATA	Not regulated.		
· Transport hazard class(es)			
· DOT, ADR, IMDG, IATA · Class	Not regulated.		
· Packing group · DOT, ADR, IMDG, IATA	Not regulated.		
· Environmental hazards	Not applicable.		
· Special precautions for user	Not applicable.		
· Transport in bulk according to Annex I MARPOL73/78 and the IBC Code	Il of Not applicable.		

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- · SARA
- · Section 302 (extremely hazardous substances):

None of the ingredients are listed.

Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

(Cont'd. on page 7)

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: October 25, 2018 Revision: October 25, 2018

Trade name: Fluoride Standard as F, 100 mg

(Cont'd. of page 6)

· TSCA (Toxic Substances Control Act)

All ingredients are listed.

- · Proposition 65 (California)
- · Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· EPA (Environmental Protection Agency):

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer):

7681-49-4 sodium fluoride

3

· Canadian Domestic Substances List (DSL) (Substances not listed.):

All ingredients are listed.

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.

· Abbreviations and acronyms:

ADR: 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

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistant, Bio-accumulable, Toxic

vPvB: very Persistent and very Bioaccumulative

OSHA: Occupational Safety & Health Administration

Acute Tox. 3: Acute toxicity – Category 3

Skin Irrit. 2: Skin corrosion/irritation - Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

SDS Prepared by:

ChemTel Inc.

(Cont'd. on page 8)

Page: 8/8

Safety Data Sheet acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: October 25, 2018 Revision: October 25, 2018

Trade name: Fluoride Standard as F, 100 mg

(Cont'd. of page 7)

1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573 Website: www.chemtelinc.com