BDH SWR ANALYTICAL

SAFETY DATA SHEET

Issuing Date 23-Jul-2012 Revision Date 12-Feb-2015 Revision Number 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name SODIUM FLUORIDE

Other means of identification

Product Code(s) BDH9290-500G

UN-No 1690

Synonyms No information available.

Recommended use of the chemical and restrictions on use

Recommended Use For Laboratory Use Only. Not for Drug, Food, or Household use.

Uses advised against Not for Human or Animal Drug Use

Details of the supplier of the safety data sheet

Company Address VWR International, LLC Radnor Corporate Center 100 Matsonford Road Radnor, PA 19087-8660

Company Phone Number 610-386-1700 **E-mail Address** www.vwr.com

Emergency Telephone Number

Emergency Telephone Number CHEMTREC 800.424.9300 CANUTEC 613.996.6666

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Toxicity - Oral	Category 3
Acute Toxicity - Dermal	Category 2
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2

Label elements

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Emerc	IDNCV		rviaw
		\mathbf{v}	1 416 44

Danger

Hazard Statements

H301 - Toxic if swallowed

H310 - Fatal in contact with skin

H315 - Causes skin irritation

H319 - Causes serious eye irritation



Appearance White to off-white

Physical State Crystalline Powder

Odor Odorless

Precautionary Statements

P262 - Do not get in eyes, on skin, or on clothing

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P302 + P350 - IF ON SKIN: Gently wash with plenty of soap and water

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

P321 - Specific treatment (see supplemental first aid instructions on this label)

P322 - Specific measures (see supplemental first aid instructions on this label)

P330 - Rinse mouth

P332 + P313 - If skin irritation occurs: Get medical advice/attention

P337 + P313 - If eye irritation persists: Get medical advice/attention

P361 - Remove/Take off immediately all contaminated clothing

P362 - Take off contaminated clothing and wash before reuse

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	EC No.	Weight %	Trade Secret
Sodium fluoride	7681-49-4	231-667-8	98-100	Not applicable

4. FIRST AID MEASURES

First Aid Measures

Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and

shoes. Consult a physician.

Inhalation Move to fresh air. If not breathing, give artificial respiration.

Clean mouth with water and afterwards drink plenty of water. Consult a physician.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific Hazards Arising from the Chemical

No information available.

Ingestion

Explosion Data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Ensure adequate ventilation, especially in confined areas.

Environmental Precautions

Environmental Precautions See Section 12 for additional Ecological information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Avoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area

and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling Handle in accordance with good industrial hygiene and safety practice. Hygroscopic.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Hygroscopic.

Incompatible Products Acids. Oxidizing agents. Metals. Alkalis. Reacts with acids to form hydrogen fluoride.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines ...

	Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Г	Sodium fluoride	TWA: 2.5 mg/m ³	TWA: 2.5 mg/m ³	IDLH: 250 mg/m ³
	7681-49-4	_		TWA: 2.5 mg/m ³

Appropriate engineering controls

Engineering Measures Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Avoid contact with eyes. Safety glasses with side-shields.

Skin and Body Protection Wear protective gloves/clothing.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical StateCrystalline PowderAppearanceWhite to off-whiteOdorOdorless

Color No information available Odor Threshold No information available

Property Values Remarks • Method

pH No information available.

Melting point/freezing point 993 °C Boiling Point/Range 1700 °C

Flash Point (High in °C)

Evaporation Rate

No information available

No information available

No information available

Flammability Limit in Air

Upper flammability limit: No information available. Lower flammability limit: No information available. Vapor pressure No information available. **Vapor Density** No information available. **Specific Gravity** No information available No information available **Water Solubility** Solubility in other solvents No information available. No information available **Partition coefficient**

Autoignition Temperature

Decomposition Temperature
Kinematic viscosity
No information available

Other Information

Softening PointNo information available.Molecular WeightNo information availableVOC ContentNo information available.DensityNo information availableBulk DensityNo information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Protect from heat. Hygroscopic. Keep away from glass and aluminum.

Incompatible Materials

Acids. Oxidizing agents. Metals. Alkalis. Reacts with acids to form hydrogen fluoride.

Hazardous Decomposition Products

Sodium oxides. Fluorides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information May be fatal if in contact with skin. Toxic if swallowed Irritating to eye, skin and respiratory

system May be harmful if inhaled

Inhalation There is no data available for this product.

Eye Contact There is no data available for this product.

Skin Contact There is no data available for this product.

Ingestion There is no data available for this product.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium fluoride 7681-49-4	= 52 mg/kg (Rat)	= 175 mg/kg(Rat)	-

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

SensitizationNo information available. **Mutagenic Effects**No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium fluoride	-	Group 3	-	-
7681-49-4				

Reproductive Toxicity
STOT - single exposure
STOT - repeated exposure
No information available.
No information available.

Target Organ Effects Kidneys, Bone, Heart, Nerves, Gastrointestinal tract (GI), Teeth, Lungs.

Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION	

Ecotoxicity

2% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Sodium fluoride	272: 96 h Pseudokirchneriella	530: 96 h Lepomis macrochirus	338: 48 h Daphnia magna mg/L
7681-49-4	subcapitata mg/L EC50 850: 72 h	mg/L LC50 830: 96 h Lepomis	EC50 98: 48 h Daphnia magna
	Desmodesmus subspicatus mg/L	macrochirus mg/L LC50 semi-static	mg/L EC50 Static
	EC50 static	38 - 68: 96 h Oncorhynchus mykiss	_
		mg/L LC50 static 180: 96 h	
		Pimephales promelas mg/L LC50	
		semi-static	

Persistence and Degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical Name	Log Pow
Sodium fluoride	-
7681-49-4	

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method Dispose of material in accordance with all federal, state, and local regulations.

Contaminated Packaging Do not re-use empty containers.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Sodium fluoride 7681-49-4	-	-	-	-

Chemical Name	California Hazardous Waste Status
Sodium fluoride	Toxic
7681-49-4	

14. TRANSPORT INFORMATION

DOT

UN-No 1690

Proper Shipping Name Sodium fluoride, solid

Hazard Class 6.1 Packing Group

IATA

UN-No 1690

Proper Shipping Name Sodium fluoride, solid

Hazard Class 6.1 Packing Group III

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies

ENCS Complies Complies **IECSC** Complies **KECL PICCS** Complies **AICS** Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	SARA 313 - Threshold Values %
Sodium fluoride	-
7681-49-4 (98-100)	

SARA 311/312 Hazard Categories

Acute Health Hazard Yes **Chronic Health Hazard** No Fire Hazard No **Sudden Release of Pressure Hazard** No Reactive Hazard No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium fluoride 7681-49-4	1000 lb	-	-	Х

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sodium fluoride 7681-49-4	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

Chemical Name	California Prop. 65
Sodium fluoride - 7681-49-4	-

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium fluoride	X	X	X
7681-49-4			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Canada

WHMIS Hazard Class

D2B Toxic materials D1B Toxic materials



16. OTHER INFORMATION

Issuing Date Revision Date Revision Note 23-Jul-2012 12-Feb-2015

No information available

<u>Disclaimer</u>

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regerd to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.

End of Safety Data Sheet