

BioFX® 650 nm Stop Reagent for TMB Microwell Substrates

Safety Data Sheet

Revision date: 03-Nov-2014

Supersedes: 17-Aug-2011

Version: 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : BioFX® 650 nm Stop Reagent for TMB Microwell Substrates
 Product form : Mixture
 Product code : BSTP

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : For laboratory use

1.3. Details of the supplier of the safety data sheet

SurModics, Inc.
 9924 West 74th Street
 Eden Prairie, MN 55344 USA
 Phone: (952) 500-7000
 Fax: (952) 500-7001

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 (US and Canada) / 1-703-527-3887 (International shipments)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Acute Tox. 3 (Oral) H301
 Acute Tox. 2 (Dermal) H310
 Skin Irrit. 2 H315
 Eye Irrit. 2A H319

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: **Danger**

Hazard statements (GHS-US)

: H301 - Toxic if swallowed
 H310 - Fatal in contact with skin
 H315 - Causes skin irritation
 H319 - Causes serious eye irritation

Precautionary statements (GHS-US)

: P262 - Do not get in eyes, on skin, or on clothing
 P264 - Wash hands, forearms and face thoroughly after handling
 P270 - Do not eat, drink or smoke when using this product
 P280 - Wear eye protection, face protection, protective clothing, protective gloves
 P301+P310 - IF SWALLOWED: Immediately call a doctor, a POISON CENTER
 P302+P352 - If on skin: Wash with plenty of 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 doctor, a POISON CENTER
 P321 - Specific treatment (see Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work 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 - Take off immediately all contaminated clothing
 P362 - Take off contaminated clothing and wash before reuse
 P363 - Wash contaminated clothing before reuse
 P405 - Store locked up
 P501 - Dispose of contents/container to licensed waste handling facility

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2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name	Product identifier	%
Sodium fluoride	(CAS No) 7681-49-4	60 - 100

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
First-aid measures after skin contact	: IF ON SKIN (or clothing), remove affected clothing and wash all exposed skin with water for at least 15 minutes. Seek medical attention if rash or irritation develops.
First-aid measures after eye contact	: IF IN EYES: Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: IF SWALLOWED: Rinse mouth, Do NOT induce vomiting, Call a POISON CENTER/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries	: Toxic if swallowed. Toxic in contact with skin. Causes skin irritation. Causes serious eye irritation.
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: Fatal in contact with skin.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: Toxic if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Foam. Carbon dioxide. Dry powder. Water spray. Sand.
Unsuitable extinguishing media	: None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: The product is not flammable.
Explosion hazard	: Product is not explosive.
Reactivity	: No dangerous reactions known under normal conditions of use.

5.3. Advice for firefighters

Precautionary measures fire	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Evacuate area. Ventilate area. Keep upwind. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).
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6.1.1. For non-emergency personnel

Protective equipment	: Wear Protective equipment as described in Section 8.
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Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.
6.2. Environmental precautions	
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.	
6.3. Methods and material for containment and cleaning up	
For containment	: Scoop solid spill into closing containers or bags. Avoid dust formation.
Methods for cleaning up	: Sweep up dry powder and dispose properly. Sweep or shovel spills into appropriate container for disposal. This material and its container must be disposed of in a safe way, and as per local legislation.
6.4. Reference to other sections	
See Sections 8 and 13.	

SECTION 7: Handling and storage

7.1. Precautions for safe handling	
Precautions for safe handling	: Do not handle until all safety precautions have been read and understood. Use appropriate personal protection equipment (PPE). Provide appropriate exhaust ventilation at places of dust forming. Keep away from sources of ignition - No smoking. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
7.2. Conditions for safe storage, including any incompatibilities	
Storage conditions	: Keep the container tightly closed. Store in a dry, cool and well-ventilated place. Avoid elevated temperatures.
Storage temperature	: Room temperature
7.3. Specific end use(s)	
No additional information available	

SECTION 8: Exposure controls/personal protection

8.1. Control parameters	
No data available	
8.2. Exposure controls	
Appropriate engineering controls	: Ensure adequate ventilation, especially in confined areas.
Personal protective equipment	: Gloves. Protective clothing. Wear chemical goggles and face shield in combination.



Hand protection	: Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl.
Eye protection	: Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles.
Skin and body protection	: Wear suitable protective clothing. Wear long sleeves.
Respiratory protection	: Where excessive vapour, mist, or dust may result, use NIOSH approved respiratory protection equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties	
Physical state	: Solid
Appearance	: Powder.
Color	: White.
Odor	: none to slight.
Odor Threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 933 °C (1,819 °F) - lit.

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Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not Flammable
Vapour pressure	: 1.9 hPa (1.4 mmHg)
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 2.78 g/cm ³
Solubility	: Water: Soluble
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Product is not explosive.
Oxidising properties	: Not an Oxidizer.
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Moisture. Elevated temperatures.

10.5. Incompatible materials

Acids.

10.6. Hazardous decomposition products

Under fire conditions, hazardous fumes will be present. Hydrogen Fluoride. Sodium oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed. Dermal: Fatal in contact with skin.

Sodium fluoride (7681-49-4)	
LD50 oral rat	52 mg/kg (Source: NLM_CIP)
LD50 dermal rat	175 mg/kg (Source: IUCLID)
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: Fatal in contact with skin.

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Symptoms/injuries after eye contact : Causes serious eye irritation.
Symptoms/injuries after ingestion : Toxic if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No information available.

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LC50 fishes 1	200 mg/l Onocorhynchus mykiss (rainbow trout) 96 h
EC50 Daphnia 1	98 mg/l Daphnia magna (water flea) 48 h

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Obtain the consent of pollution control authorities before discharging to wastewater treatment plants.
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

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SECTION 14: Transport information

In accordance with DOT

Transport document description : UN1690 Sodium fluoride, solid, 6.1, III
UN-No.(DOT) : 1690
DOT NA no. : UN1690
Proper Shipping Name (DOT) : Sodium fluoride, solid
Department of Transportation (DOT) Hazard Classes : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132
Hazard labels (DOT) : 6.1 - Poison inhalation hazard



Packing group (DOT) : III - Minor Danger
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 100 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 200 kg
DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other : 52 - Stow "separated from" acids

Additional information

Other information : No supplementary information available.

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

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All chemical substances in this product are listed in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory
All the constituents of this preparation are registered in the EINECS inventory or in the ELINCS list

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
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Sodium fluoride (7681-49-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

RQ (Reportable quantity, section 304 of EPA's List of Lists) :	1000 lb
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15.2. International regulations

CANADA

No additional information available

15.3. US State regulations

California Proposition 65

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

Sodium fluoride (7681-49-4)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

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SECTION 16: Other information

Indication of changes : Revision 1: New SDS Created.

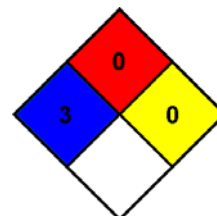
Revision date : 03-Nov-2014

Other information : Author: BCS.

NFPA health hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



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