



# Cell Signaling

TECHNOLOGY®

**SAFETY DATA SHEET (SDS):** According to the OSHA Hazard Communication Standard 29 CFR 1910.1200

**Issuing Date:** 2014-02-10

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**Version:** 1

## SECTION 1. Identification

### Product identifier

**Product No.** 7018  
**Product name** PathScan® Sandwich ELISA Lysis Buffer (1X)  
**Other means of identification** 7018M, 7018P2, 7018S

### Recommended use of the chemical and restrictions on use

**Identified uses** This product is intended for research purposes only.  
**Uses advised against** This product is not intended for use in diagnostic procedures or therapeutics.  
This product is not intended for use in humans or animals.

### Manufacturer, importer, supplier

**Manufacturer address** Cell Signaling Technology, Inc.  
3 Trask Lane  
Danvers, MA 01923  
TEL: +1 978 867 2300  
FAX: +1 978 867 2400  
**Website** www.cellsignal.com  
**Email address** support@cellsignal.com  
**Company phone number** 978-867-2300  
**Emergency telephone number** In case of emergency call CHEMTREC 1-800-424-9300

## SECTION 2. Hazard(s) identification

### Classification

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

<b>Serious eye damage/eye irritation</b>	Category 2A
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### GHS Label elements, including precautionary statements



**Signal Word**  
Warning

**Hazard statement(s)**

Causes serious eye irritation

### Precautionary Statement(s)

Wash face, hands and any exposed skin thoroughly after handling

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention

### Supplementary Hazard Information

**Hazards not otherwise classified (HNOC)** Contact with acids liberates very toxic gas

## SECTION 3. Composition/information on ingredients

**Chemical nature** Aqueous solution of organic and inorganic compounds.

Chemical Name	CAS No.	Weight %
sodium fluoride	7681-49-4	0.1-1
tetrasodium pyrophosphate, decahydrate	13472-36-1	0.1-1
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether	9002-93-1	0.5-1.5

## SECTION 4. 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 skin with soap and water.

**Inhalation** Move to fresh air.

**Ingestion** Call a physician immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting - seek medical advice. Rinse mouth.

### Most important symptoms and effects, both acute and delayed

No information or data specific to the product on this toxicological (health) effect is available.

### Indication of any immediate medical attention and special treatment needed

**Notes to physician** Treat symptomatically.

### Advice for emergency responders

**General advice** For further assistance, contact your local Poison Control Center.

**Protection of First-aiders** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## SECTION 5. Fire-fighting measures

### Extinguishing media

**Suitable Extinguishing Media** Use: Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray. Alcohol-resistant foam.

**Unsuitable Extinguishing Media** CAUTION: Use of water spray when fighting fire may be inefficient.

### Specific hazards arising from the chemical

No information available.

**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.

**SECTION 6. Accidental release measures****Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel** Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective equipment.

**Other information** No information available.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**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** Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

**SECTION 7. Handling and storage****Precautions for safe handling**

Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Prevent the formation of vapors, mists and aerosols.

**Conditions for safe storage, including any incompatibilities**

**Technical measures/Storage conditions** Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.

**Packaging material** No information available.

**Incompatible products** None known based on information supplied.

**SECTION 8. Exposure controls/personal protection****Control parameters**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH REL
sodium fluoride 7681-49-4	TWA: 2.5 mg/m <sup>3</sup>	TWA: 2.5 mg/m <sup>3</sup> (vacated) TWA: 2.5 mg/m <sup>3</sup>	IDLH: 250 mg/m <sup>3</sup> TWA: 2.5 mg/m <sup>3</sup>
tetrasodium pyrophosphate, decahydrate 13472-36-1	-	(vacated) TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> (Listed as: Tetrasodium pyrophosphate)

(vacated) = Vacated limits revoked by the Court of Appeals decision in *AFL-CIO v. OSHA*, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

Showers, eyewash stations, and ventilation systems.

### **Individual protection measures, such as personal protective equipment**

Personal protective equipment (PPE) needs to be selected depending on the implemented engineering controls, frequency/duration of work activities and the concentrations of the hazardous substance.

<b>Eye/face protection</b>	Tightly fitting safety goggles.
<b>Skin and body protection</b>	Wear protective gloves/clothing.
<b>Respiratory protection</b>	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.
<b>Hygiene measures</b>	Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

## **SECTION 9. Physical and chemical properties**

### **Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid
<b>Appearance</b>	No information available
<b>Odor</b>	No information available
<b>Color</b>	Clear
<b>Odor Threshold</b>	No information available
<b>pH</b>	7.5
<b>Melting point/freezing point</b>	No information available
<b>Initial boiling point and boiling range</b>	No information available
<b>Flash point</b>	No information available
<b>Evaporation rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Upper flammability limit</b>	No information available
<b>Lower flammability limit</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Relative density</b>	No information available
<b>Solubility</b>	No information available
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient: n-octanol/water</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available
<b>VOC content</b>	No information available
<b>Viscosity</b>	No information available
<b>Density</b>	No information available

## **SECTION 10. Stability and reactivity**

### **Reactivity**

No information available.

### **Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

**Hazardous reactions** None under normal processing.  
**Hazardous polymerization** None under normal processing.

**Conditions to Avoid**

No information available.

**Incompatible Materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

**SECTION 11. Toxicological information****Information on likely routes of exposure**

**Inhalation** There is no data available for this product.  
**Eye contact** Expected to be an irritant based on components.  
**Skin contact** There is no data available for this product.  
**Ingestion** There is no data available for this product.

**Information on toxicological effects**

This material should only be handled by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals. It should be borne in mind that the toxicological and physiological properties of this compound is not well defined.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
sodium fluoride 7681-49-4	= 52 mg/kg ( Rat )	= 175 mg/kg ( Rat )	-
tetrasodium pyrophosphate, decahydrate 13472-36-1	> 2000 mg/kg ( Rat )	-	-
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylet her 9002-93-1	= 1,800 mg/kg (Rat)	= 8,000 mg/kg (Rabbit)	-

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

**Symptoms** No information available.  
**Corrosivity** No information available.  
**Sensitization** No information available.  
**Mutagenic effects** No information available.  
**Carcinogenicity** No component of this product present at levels greater than or equal to 0.1% is identifiable as probable, possible or confirmed carcinogen by IARC, ACGIH, NTP, or OSHA.  
**Reproductive toxicity** No information available.  
**Developmental Toxicity** No information available.  
**Teratogenicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Neurological effects** No information available.  
**Aspiration Hazard** No information available.  
**Endocrine Disruptor Information** No information available.

## SECTION 12. Ecological information

### Ecotoxicity

99.02% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
sodium fluoride 7681-49-4	EC50 850 mg/L (Desmodesmus subspicatus) 72 h EC50 272 mg/L (Pseudokirchneriella subcapitata) 96 h	LC50 180 mg/L (Pimephales promelas) 96 h LC50 830 mg/L (Lepomis macrochirus) 96 h LC50 38 - 68 mg/L (Oncorhynchus mykiss) 96 h LC50 530 mg/L (Lepomis macrochirus) 96 h	EC50 338 mg/L (Daphnia magna) 48 h EC50 98 mg/L (Daphnia magna) 48 h
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether 9002-93-1		LC50: 8.9 mg/L (Pimephales promelas) 96 h	EC50: 26 mg/L (Daphnia) 48 h

<b>Persistence and degradability</b>	No information available.
<b>Bioaccumulation</b>	No information available.
<b>Mobility</b>	No information available.

### Other adverse effects

No information available.

## SECTION 13. Disposal considerations

### Waste Disposal Methods

Dispose of in accordance with all applicable national environmental laws and regulations.

### Disposal considerations

Do not empty into drains; dispose of this material and its container in a safe way.

**California Waste Status** This product contains one or more substances that are listed with the State of California as a hazardous waste

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

## SECTION 14. Transport information

This material is not subject to regulation as a hazardous material for shipping.

## SECTION 15. Regulatory information

**All of the components in the product are on the following Inventory lists:**

<b>TSCA</b>	-
<b>DSL</b>	-
<b>NDSL</b>	Complies

**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.

**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	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			X

**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
sodium fluoride 7681-49-4	1000 lb	

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
sodium fluoride 7681-49-4	Listed	Listed	Listed
tetrasodium pyrophosphate, decahydrate 13472-36-1	Listed	Listed	Listed

**U.S. EPA Label Information**

This product does not contain any substances regulated as pesticides.

**SECTION 16. Other information**

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**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet