

# Material Safety Data Sheet (MSDS) for PhosphoScan™ Kit



## I. IDENTIFICATION:

**Product name:** PhosphoScan™ Kit

**Product Catalog:** 7900 series

**CAS number:** Not applicable to mixtures

**Manufacturer Supplier:** Cell Signaling Technology

166B Cummings Center

Beverly MA 01915

(978) 867-2300 TEL

(978) 867-2400 FAX

## II. COMPOSITION/INFORMATION ON INGREDIENTS:

Reagents	CAS#	Percent	Hazardous
Dithiothreitol (DTT, 1.25M)	3483-12-3	19.3%	Yes
Sodium orthovanadate (100X)	13721-39-6	1.8%	Yes

## III. HAZARD IDENTIFICATION:

### Emergency Overview of Hazardous ingredient, Dithiothreitol:

Toxic, Harmful.

Health Rating: 2

Flammability Rating: 1

Reactivity Rating: 1

Lab Protective Equip: lab coat; proper gloves; safety glasses

### Emergency Overview of Hazardous ingredient, Sodium orthovanadate:

Toxic, Harmful.

Health Rating: 2

Flammability Rating: 0

Reactivity Rating: 0

Lab Protective Equip: lab coat; proper gloves; safety glasses

## IV. FIRST AID MEASURES:

### For hazardous ingredients dithiothreitol, sodium orthovanadate

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

**Ingestion:** Wash out mouth with water. Never give anything by mouth to an unconscious person. Call a physician.

**Skin contact:** Wash skin with soap or mild detergent and water for at least 15 minutes. Get medical attention if irritation develops or persists.

**Eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

## V. FIRE FIGHTING MEASURES:

Flash point: N/A

**Explosion:** Not considered to be an explosion hazard.

**Fire extinguishing media:** Use fire extinguisher appropriate for surrounding fire.

## VI. ACCIDENTAL RELEASE MEASURES:

Wear NIOSH approved respirator and protective gloves. Collect spill for disposal, use normal clean up procedures for liquid spillage and wash thoroughly with water. Wash contaminated clothing before reuse. Dispose of waste in accordance with Federal, State and local regulations.

## VII. HANDLING AND STORAGE:

Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Keep containers tightly closed.

Store at room temperature.

## VIII. EXPOSURE CONTROLS/ PERSONAL PROTECTION:

**Ventilation System:** A system of local and/or general exhaust is recommended

**Skin Protection:** Gloves and lab coat

**Eye protection:** Chemical safety glasses/goggles

Maintain eye wash fountain and quick-drench facilities in work area.

## IX. PHYSICAL AND CHEMICAL PROPERTIES:

### Dithiothreitol, 1.25M

**Appearance:** Colorless liquid.

**Odor:** Odorless

**Boiling Point:** Data not known

**Melting Point:** Data not known

**Vapor Pressure:** Data not known

**Vapor Density:** Data not known

**Sodium orthovanadate, 100X****Appearance:** Colorless liquid**Odor:** Unpleasant odor**Boiling Point:** Data not known**Melting Point:** Data not known**Vapor Pressure:** Data not known**Vapor Density:** Data not known**X. STABILITY AND REACTIVITY:****Stability:** Kit reagents are stable under ordinary conditions**Hazardous decomposition products:** Not known**Hazardous polymerization:** Will not occur**Conditions to avoid:** Strong oxidizing agents**XI. TOXICOLOGICAL INFORMATION:****Routes of Exposure****Skin contact:** May cause skin irritation.**Skin adsorption:** Harmful if absorbed through skin.**Eye contact:** May cause eye irritation.**Ingestion:** Harmful if swallowed.**Inhalation:** Harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.**Target Organs (For Dithiothreitol solution):** Central nervous system**Dithiothreitol  
Ingredient**

Oral rat LD50	400 mg/kg
Intraperitoneal mouse LD50	36 mg/kg
Chronic exposure	data not found

**Sodium orthovanadate  
Ingredient**

Oral rat LD50	330 mg/kg
Intraperitoneal mouse LD50	154 mg/kg
Chronic exposure	teratogen, mutagen, reproductive hazard

**XII. ECOLOGICAL INFORMATION:**

Data not available.

**XIII. DISPOSAL CONSIDERATIONS:**

Dispose of in accordance with federal, state and local requirements.

**XIV. TRANSPORT INFORMATION:****Not regulated.****D.O.T.**

Kit components are considered non hazardous for transport.

**IATA**

Kit components are considered non hazardous for transport.

**XV. REGULATORY INFORMATION:****Dithiothreitol**

Indication of Danger	Toxic (USA), Harmful (EU)
SARA Listed	No
TSCA Inventory	Yes

**Sodium Orthovanadate**

Indication of Danger	Toxic (USA), Harmful (EU)
SARA Listed	No
TSCA Inventory	Yes

**XVI. OTHER INFORMATION:**

This kit is intended for use in the research laboratory by personnel familiar with the toxicology of chemicals and who are well trained in good laboratory habits such as avoiding spills, keeping hands clean at all times and not rubbing eyes with hands while working in the laboratory.

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide for experienced personnel. Cell Signaling Technology, Inc., shall not be held liable for any damage resulting from the handling of or from contact with the above product. The burden of safe use of this material rests entirely with the user.

© Cell Signaling Technologies, Inc. All rights reserved.

January 2005