

**Safety Data Sheet (SDS)** According to the REACH Regulation (EC) No. 1907/2006

**Issuing Date:** 2018-01-19

**Revision Date:** 2025-02-19

**Version:** 2

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

### 1.1. Product identifier

<b>Product No</b>	7134
<b>Product name</b>	PathScan® Phospho-Akt1 (Ser473) Chemiluminescent Sandwich ELISA Kit
<b>Kit Component</b>	68418: Phospho-Akt (Ser473) Rabbit mAb Coated Microwells 13080: Akt1 Mouse Detection mAb 13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated) 84850: Luminol/Enhancer Solution 42552: Stable Peroxide Buffer 11083: ELISA Sample Diluent 13339: Detection Antibody Diluent 13515: HRP Diluent 9801: ELISA Wash Buffer (20X) 9803: Cell Lysis Buffer (10X)

### Hazardous Components

**9801: ELISA Wash Buffer (20X)**

**9803: Cell Lysis Buffer (10X)**

**13515: HRP Diluent**

### Contains

<b>Chemical name</b>	<b>Index No.</b>	<b>CAS No</b>
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether (10 - 20%)	Not Listed	9002-93-1
Ethylene glycol (0 - 10%)	603-027-00-1	107-21-1
tetrasodium pyrophosphate, decahydrate (0 - 10%)	Not Listed	13472-36-1
sodium azide (0 - 10%)	011-004-00-7	26628-22-8
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one (0 - 10%)	613-167-00-5	55965-84-9

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

**Identified uses** For Research Use Only. Not for Use in Diagnostic Procedures.

### 1.3. Details of the supplier of the safety data sheet

#### **Importer**

Cell Signaling Technology Europe B.V.  
Dellaertweg 9b  
2316 WZ Leiden  
The Netherlands  
TEL: +31 (0)71 7200 200  
FAX: +31 (0)71 891 0019

#### **Manufacturer**

Cell Signaling Technology, Inc.  
3 Trask Lane  
Danvers, MA 01923  
United States  
TEL: +1 978 867 2300  
FAX: +1 978 867 2400

Website www.cellsignal.com  
E-mail Address info@cellsignal.eu

**1.4. Emergency telephone number**

**CHEMTREC** 24 hours a day, 7 days a week, 365 days a year  
+1 703 527 3887 (INTERNATIONAL) +1 800 424 9300 (NORTH AMERICA)

Europe 112

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

Regulation (EC) No. 1272/2008

Classification and label elements described below are inclusive of all hazards of the combined kit. The most severe classifications are listed for each endpoint. Refer to individual kit component SDS for classification and label elements for each component present in the kit.

<b>Skin corrosion/irritation</b>	Category 2 - (H315)
<b>Serious eye damage/eye irritation</b>	Category 1 - (H318)
<b>Skin sensitization</b>	Category 1 - (H317)
<b>Chronic aquatic toxicity</b>	Category 3 - (H412)

**2.2. Label elements**



**Signal word**

Danger

**Hazard statement(s)**

- H315 - Causes skin irritation
- H317 - May cause an allergic skin reaction
- H318 - Causes serious eye damage
- H412 - Harmful to aquatic life with long lasting effects

**Precautionary statement(s)**

- P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
- P272 - Contaminated work clothing should not be allowed out of the workplace.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- 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.
- P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.
- P363 - Wash contaminated clothing before reuse.
- P501 - Dispose of contents/container to an approved waste disposal plant.

**2.3. Other hazards**

## 7134 - PathScan® Phospho-Akt1 (Ser473) Chemiluminescent Sandwich ELISA Kit

This kit contains one or more components considered a treated article that incorporates a biocidal product as a preservative with the following active ingredient: Mixture of 5-chloro-2-methyl-2H- isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS 220-239-6) (Mixture of CMIT/MIT).

Polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether (CAS no. 9002-93-1) is a suspected endocrine disruptor. Endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100(3) or Commission Regulation (EU) 2018/605(4).

For the full text of the H-phrases & EUH-phrases mentioned in this Section, see Section 16

### SECTION 3. Composition/information on ingredients

#### Kit Component 84850: Luminol/Enhancer Solution

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
Ethylene glycol	107-21-1	1-3	203-473-3	Acute Tox. 4 (H302)	no data available

#### Kit Component 9801: ELISA Wash Buffer (20X)

WARNING: May cause an allergic skin reaction.

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one	55965-84-9	0.005-0.025	-	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 2 (H310) Acute Tox. 2 (H330) Skin Corr. 1B (H314) Skin Corr. 1C (H314) Eye Dam. 1 (H318) Skin Sens. 1A (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) (EUH071)	no data available

This product is considered a treated article that incorporates a biocidal product as a preservative with the following active ingredient: Mixture of 5-chloro-2-methyl-2H- isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS 220-239-6) (Mixture of CMIT/MIT)

#### Kit Component 11083: ELISA Sample Diluent

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
sodium azide	26628-22-8	<0.1	247-852-1	Acute Tox. 2 (H300) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) (EUH032)	no data available

#### Kit Component 9803: Cell Lysis Buffer (10X)

DANGER: Causes severe skin burns and eye damage. May cause an allergic skin reaction.

7134 - PathScan® Phospho-Akt1 (Ser473) Chemiluminescent Sandwich ELISA Kit

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether	9002-93-1	10	618-344-0	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 2 (H411)	no data available
tetrasodium pyrophosphate, decahydrate	13472-36-1	0.1-1	-	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	no data available

Polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether is a suspected endocrine disruptor.

**Kit Component 13339: Detection Antibody Diluent**

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
sodium azide	26628-22-8	<0.1	247-852-1	Acute Tox. 2 (H300) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) (EUH032)	no data available

**Kit Component 13515: HRP Diluent**

WARNING: May cause an allergic skin reaction.

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one	55965-84-9	0.005-0.025	-	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 2 (H310) Acute Tox. 2 (H330) Skin Corr. 1B (H314) Skin Corr. 1C (H314) Eye Dam. 1 (H318) Skin Sens. 1A (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) (EUH071)	no data available

This product is considered a treated article that incorporates a biocidal product as a preservative with the following active ingredient: Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS 220-239-6) (Mixture of CMIT/MIT)

**Kit Component 68418: Phospho-Akt (Ser473) Rabbit mAb Coated Microwells  
13080: Akt1 Mouse Detection mAb  
13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)  
42552: Stable Peroxide Buffer**

These products do not contain substances at concentrations requiring disclosure under (EC) No. 1907/2006 (REACH).

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>General advice</b>	Use first aid treatment according to the nature of the injury. When symptoms persist or in all cases of doubt seek medical advice.
<b>Inhalation</b>	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately if symptoms occur. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation or rash occurs: Get medical advice/attention.
<b>Eye contact</b>	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
<b>Ingestion</b>	Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.
<b>Protection of first-aiders</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

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

Contains kit components which may cause the following effects, refer to individual component SDSs for full information on symptoms. Liquid, aerosols and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes. Contains an animal derived biological. May produce an allergic reaction in susceptible individuals. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

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

**Notes to physician** Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
<b>Unsuitable Extinguishing Media</b>	No information available

### 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Ensure adequate ventilation.
<b>For emergency responders</b>	Use personal protection recommended in Section 8.
<b>Other information</b>	Refer to protective measures listed in Sections 7 and 8.

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**6.2. Environmental precautions**

Do not allow material to contaminate ground water system. Should not be released into the environment. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so.

**6.3. 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**

Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Prevent product from entering drains. Clean contaminated surface thoroughly.

**6.4. Reference to other sections**

See Sections 8 & 13 for additional information.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation at machinery.

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

Keep away from direct sunlight. Keep containers tightly closed in a dry, cool and well-ventilated place.

**7.3. Specific end use(s)**

Use as a laboratory reagent.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

<b>Occupational exposure limit values</b>					
<b>Chemical name</b>	<b>European Union</b>	<b>United Kingdom</b>	<b>France</b>	<b>Spain</b>	<b>Germany</b>
Ethylene glycol	TWA 20 ppm TWA 52 mg/m <sup>3</sup> STEL 40 ppm STEL 104 mg/m <sup>3</sup> S*	STEL 40 ppm STEL 104 mg/m <sup>3</sup> STEL 30 mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup> TWA 20 ppm TWA 52 mg/m <sup>3</sup> Skin	TWA 20 ppm TWA 52 mg/m <sup>3</sup> STEL 40 ppm STEL 104 mg/m <sup>3</sup> P*	TWA 20 ppm TWA 52 mg/m <sup>3</sup> STEL 40 ppm STEL 104 mg/m <sup>3</sup> S*	TWA: 10 ppm TWA: 26 mg/m <sup>3</sup> Skin Ceiling / Peak: 20 ppm Ceiling / Peak: 52 mg/m <sup>3</sup> H*
tetrasodium pyrophosphate, decahydrate		STEL 15 mg/m <sup>3</sup> TWA 5 mg/m <sup>3</sup>	TWA 5 mg/m <sup>3</sup>		
sodium azide	TWA 0.1 mg/m <sup>3</sup> STEL 0.3 mg/m <sup>3</sup> S*	STEL 0.3 mg/m <sup>3</sup> TWA 0.1 mg/m <sup>3</sup> Skin	TWA 0.1 mg/m <sup>3</sup> STEL 0.3 mg/m <sup>3</sup> P*	TWA 0.1 mg/m <sup>3</sup> STEL 0.3 mg/m <sup>3</sup> S*	TWA: 0.2 mg/m <sup>3</sup> Ceiling / Peak: 0.4 mg/m <sup>3</sup>
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one					Ceiling / Peak: 0.4 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup>
<b>Chemical name</b>	<b>Italy</b>	<b>Portugal</b>	<b>Netherlands</b>	<b>Finland</b>	<b>Denmark</b>
Ethylene glycol	TWA 20 ppm TWA 52 mg/m <sup>3</sup>	TWA 20 ppm TWA 52 mg/m <sup>3</sup>	Huid* STEL 40 ppm	TWA 20 ppm TWA 50 mg/m <sup>3</sup>	TWA 10 ppm TWA 26 mg/m <sup>3</sup>

	STEL 40 ppm STEL 104 mg/m <sup>3</sup> Pelle*	STEL 40 ppm STEL 104 mg/m <sup>3</sup> Ceiling 100 mg/m <sup>3</sup> C(A4) P*	STEL 104 mg/m <sup>3</sup> TWA 52 mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup>	STEL 40 ppm STEL 100 mg/m <sup>3</sup> iho*	TWA 10 mg/m <sup>3</sup> STEL 104 mg/m <sup>3</sup> STEL 40 ppm STEL 20 mg/m <sup>3</sup> H*
tetrasodium pyrophosphate, decahydrate					TWA 5 mg/m <sup>3</sup> STEL 10 mg/m <sup>3</sup>
sodium azide	TWA 0.1 mg/m <sup>3</sup> STEL 0.3 mg/m <sup>3</sup> Pelle*	TWA 0.1 mg/m <sup>3</sup> STEL 0.3 mg/m <sup>3</sup> Ceiling 0.29 mg/m <sup>3</sup> Ceiling 0.11 ppm C(A4) P*	Huid* STEL 0.3 mg/m <sup>3</sup> TWA 0.1 mg/m <sup>3</sup>	TWA 0.1 mg/m <sup>3</sup> STEL 0.3 mg/m <sup>3</sup> iho*	TWA 0.1 mg/m <sup>3</sup> STEL 0.3 mg/m <sup>3</sup> H*
<b>Chemical name</b>	<b>Austria</b>	<b>Switzerland</b>	<b>Poland</b>	<b>Norway</b>	<b>Ireland</b>
Ethylene glycol	H* STEL 20 ppm STEL 52 mg/m <sup>3</sup> TWA 10 ppm TWA 26 mg/m <sup>3</sup>	SS-C** H* TWA 10 ppm TWA 26 mg/m <sup>3</sup> STEL 20 ppm STEL 52 mg/m <sup>3</sup>	TWA 15 mg/m <sup>3</sup> STEL 50 mg/m <sup>3</sup>	TWA 20 ppm TWA 52 mg/m <sup>3</sup> S* STEL 104 mg/m <sup>3</sup> STEL 40 ppm	TWA 20 ppm TWA 52 mg/m <sup>3</sup> STEL 40 ppm STEL 104 mg/m <sup>3</sup> Skin
tetrasodium pyrophosphate, decahydrate	STEL 10 mg/m <sup>3</sup> TWA 5 mg/m <sup>3</sup>	TWA 5 mg/m <sup>3</sup>		TWA 5 mg/m <sup>3</sup> STEL 10 mg/m <sup>3</sup>	TWA 5 mg/m <sup>3</sup> STEL 15 mg/m <sup>3</sup>
sodium azide	H* STEL 0.3 mg/m <sup>3</sup> TWA 0.1 mg/m <sup>3</sup>	TWA 0.2 mg/m <sup>3</sup> STEL 0.4 mg/m <sup>3</sup>	TWA 0.1 mg/m <sup>3</sup> STEL 0.3 mg/m <sup>3</sup>	TWA 0.1 mg/m <sup>3</sup> STEL 0.3 mg/m <sup>3</sup>	TWA 0.1 mg/m <sup>3</sup> STEL 0.3 mg/m <sup>3</sup> Skin
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one	TWA 0.05 mg/m <sup>3</sup> Sh/Sah**	SS-C** S+ TWA 0.2 mg/m <sup>3</sup> STEL 0.4 mg/m <sup>3</sup>			

## 8.2. Exposure controls

### Appropriate engineering controls

Showers, eyewash stations, and ventilation systems

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

#### Eye/face protection

Tightly fitting safety goggles.

#### Skin protection

Wear protective gloves and protective clothing.

#### Hand protection

Impervious gloves.

#### Other

Chemical resistant apron Boots Impervious clothing Impervious gloves

#### Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. No special protective equipment required.

### Environmental Exposure Controls

No information available

## SECTION 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Information on the known physical chemical properties of each component within Kit are given below. If not included, information is either not available or not applicable. Refer to individual kit component SDS for further information.

#### Kit Component

Physical state  
Appearance  
Color  
pH  
Solubility

#### 84850: Luminol/Enhancer Solution

Liquid  
Clear  
Colorless or Light pink  
9.5 (20 °C)  
Soluble in water





Stable under normal conditions

### 10.3. Possibility of hazardous reactions

**Hazardous polymerization** Hazardous polymerization does not occur.  
**Hazardous reactions** None under normal processing

### 10.4. Conditions to avoid

Extremes of temperature and direct sunlight. Exposure to air or moisture over prolonged periods. Over a period of time, sodium azide may react with copper, lead, brass, or solder in plumbing systems to form an accumulation of the HIGHLY EXPLOSIVE compounds of lead azide & copper azide.

### 10.5. Incompatible materials

Metals, Strong oxidizing agents, strong acids, and strong bases

### 10.6. Hazardous decomposition products

Thermal decomposition can lead to release of irritating and toxic gases and vapors  
 Nitrogen oxides (NOx)  
 Carbon oxides (COx)

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### **Product Information**

Refer to kit component SDS for full toxicological information. 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.

#### **Component Information**

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether	= 1700 mg/kg (Rat) = 1800 mg/kg (Rat)	-	-
Ethylene glycol	= 4700 mg/kg (Rat)	= 10600 mg/kg (Rat)	> 2.5 mg/L (Rat) 6 h
tetrasodium pyrophosphate, decahydrate	-	> 2000 mg/kg (Rabbit)	-
sodium azide	= 27 mg/kg (Rat)	= 20 mg/kg (Rabbit) = 50 mg/kg (Rat)	-
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one	= 481 mg/kg (Rat) = 120 mg/kg (Rat) = 53 mg/kg (Rat)	= 200 mg/kg (Rabbit) = 87.12 mg/kg (Rabbit)	= 1.23 mg/L (Rat) 4 h = 0.11 mg/L (Rat) 4 h

#### **Information on likely routes of exposure**

##### Inhalation

**Kit Component**  
Inhalation

**84850: Luminol/Enhancer Solution**  
Avoid breathing vapors or mists May cause allergic respiratory reaction

**Kit Component**  
Inhalation

**42552: Stable Peroxide Buffer**  
May cause irritation of respiratory tract

<b>Kit Component</b> Inhalation	<b>9801: ELISA Wash Buffer (20X)</b> Avoid breathing vapors or mists May cause irritation of respiratory tract
<b>Kit Component</b> Inhalation	<b>13080: Akt1 Mouse Detection mAb</b> May cause allergic respiratory reaction
<b>Kit Component</b> Inhalation	<b>13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)</b> May cause allergic respiratory reaction
<b>Kit Component</b> Inhalation	<b>13515: HRP Diluent</b> Avoid breathing vapors or mists May cause irritation of respiratory tract

**Eye contact**

<b>Kit Component</b> Eye contact	<b>84850: Luminol/Enhancer Solution</b> Avoid contact with eyes
<b>Kit Component</b> Eye contact	<b>42552: Stable Peroxide Buffer</b> Expected to be an irritant based on components May cause slight irritation
<b>Kit Component</b> Eye contact	<b>9801: ELISA Wash Buffer (20X)</b> Expected to be an irritant based on components
<b>Kit Component</b> Eye contact	<b>9803: Cell Lysis Buffer (10X)</b> Expected to be an irritant based on components
<b>Kit Component</b> Eye contact	<b>13515: HRP Diluent</b> Contact with eyes may cause irritation

**Skin contact**

<b>Kit Component</b> Skin contact	<b>84850: Luminol/Enhancer Solution</b> Avoid contact with skin
<b>Kit Component</b> Skin contact	<b>42552: Stable Peroxide Buffer</b> Substance may cause slight skin irritation
<b>Kit Component</b> Skin contact	<b>9801: ELISA Wash Buffer (20X)</b> Repeated or prolonged skin contact may cause allergic reactions with susceptible persons Expected to be an irritant based on components
<b>Kit Component</b> Skin contact	<b>13080: Akt1 Mouse Detection mAb</b> Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
<b>Kit Component</b> Skin contact	<b>13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)</b> Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
<b>Kit Component</b> Skin contact	<b>13515: HRP Diluent</b> Repeated or prolonged skin contact may cause allergic reactions with susceptible persons

**Ingestion**

<b>Kit Component</b> Ingestion	<b>84850: Luminol/Enhancer Solution</b> Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
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<b>Kit Component</b> Ingestion	<b>42552: Stable Peroxide Buffer</b> Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
<b>Kit Component</b> Ingestion	<b>9801: ELISA Wash Buffer (20X)</b> Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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

**Symptoms** Contains kit components which may cause the following effects, refer to individual component SDSs for full information on symptoms. Liquid, aerosols and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes. Contains an animal derived biological. May produce an allergic reaction in susceptible individuals. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

**Skin and Eye Corrosion/Irritation**

<b>Kit Component</b> Serious eye damage/eye irritation Skin corrosion/irritation	<b>9801: ELISA Wash Buffer (20X)</b> Causes serious eye irritation Causes skin irritation
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<b>Kit Component</b> Serious eye damage/eye irritation	<b>9803: Cell Lysis Buffer (10X)</b> Irritating to eyes
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**Sensitization**

<b>Kit Component</b> Skin Sensitization	<b>9801: ELISA Wash Buffer (20X)</b> Product is or contains a sensitizer. May cause an allergic skin reaction
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<b>Kit Component</b> Respiratory Sensitization Skin Sensitization	<b>13080: Akt1 Mouse Detection mAb</b> May cause allergy or asthma symptoms or breathing difficulties if inhaled May cause skin sensitization
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<b>Kit Component</b> Respiratory Sensitization Skin Sensitization	<b>13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)</b> May cause allergy or asthma symptoms or breathing difficulties if inhaled May cause skin sensitization
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<b>Kit Component</b> Skin Sensitization	<b>13515: HRP Diluent</b> Product is or contains a sensitizer. May cause an allergic skin reaction
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**Mutagenic effects** No information available.

**Carcinogenic effects** No information available

**Reproductive toxicity** No information available.

**Systemic Target Organ Toxicity (STOT)**

<b>Kit Component</b> STOT - repeated exposure Target Organ Effects	<b>84850: Luminol/Enhancer Solution</b> May cause damage to organs through prolonged or repeated exposure Kidney
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**Aspiration Hazard** No information available.

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**11.2. Information on other hazards**

**Other adverse effects** No information available.

**SECTION 12: Ecological information****12.1. Toxicity****Product Information**

**Kit Component** **9801: ELISA Wash Buffer (20X)**  
**Ecotoxicity** Harmful to aquatic life with long lasting effects

**Component Information**

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether	-	LC50 8.9 mg/l (Pimephales promelas) 96 h	EC50 26 mg/l (Daphnia) 48 h
Ethylene glycol	EC50 6500 - 13000 mg/L (Pseudokirchneriella subcapitata) 96 h	LC50 41000 mg/L (Oncorhynchus mykiss) 96 h LC50 14 - 18 mL/L (Oncorhynchus mykiss) 96 h LC50 27540 mg/L (Lepomis macrochirus) 96 h LC50 40761 mg/L (Oncorhynchus mykiss) 96 h LC50 40000 - 60000 mg/L (Pimephales promelas) 96 h LC50 16000 mg/L (Poecilia reticulata) 96 h	EC50 46300 mg/L (Daphnia magna) 48 h
sodium azide	EC50 0.35 mg/L (Pseudokirchneriella subcapitata) 96 h	LC50 0.8 mg/L (Oncorhynchus mykiss) 96 h LC50 0.7 mg/L (Lepomis macrochirus) 96 h LC50 5.46 mg/L (Pimephales promelas) 96 h	LC100 1 mg/L (Orconectes rusticus) 96 h
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one	EC50 0.11 - 0.16 mg/L (Pseudokirchneriella subcapitata) 72 h EC50 0.03 - 0.13 mg/L (Pseudokirchneriella subcapitata) 96 h	LC50 1.6 mg/L (Oncorhynchus mykiss) 96 h	EC50 4.71 mg/L (Daphnia magna) 48 h EC50 0.12 - 0.3 mg/L (Daphnia magna) 48 h EC50 0.71 - 0.99 mg/L (Daphnia magna) 48 h

**12.2. Persistence and degradability**

**Kit Component** **9801: ELISA Wash Buffer (20X)**  
**Persistence and degradability** Not readily biodegradable

**12.3. Bioaccumulative potential**

**Kit Component** **9801: ELISA Wash Buffer (20X)**  
**Bioaccumulation** Not likely to bioaccumulate

Chemical name	Octanol-Water Partition Coefficient
Ethylene glycol	-1.36
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one	$\geq -0.32$ - $\leq 0.7$

**12.4. Mobility in soil**

**Kit Component**  
Mobility

**9801: ELISA Wash Buffer (20X)**  
Will likely be mobile in the environment due to its water solubility

**12.5. Results of PBT and vPvB assessment**

No information available.

**12.6. Endocrine disrupting properties**

Chemical name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether	Endocrine disrupting properties, Article 57f - environment	-	-

**12.7. Other adverse effects**

No information available

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Do not re-use empty containers.
<b>Other information</b>	Waste codes should be assigned by the user based on the application for which the product was used.

**SECTION 14: Transport information****IMDG/IMO**

<b>14.1 UN number</b>	Not regulated
<b>14.2 UN proper shipping name</b>	Not regulated
<b>14.3 Transport hazard class(es)</b>	Not regulated
<b>14.4 Packing group</b>	Not regulated
<b>14.5 Environmental hazards</b>	None
<b>14.6 Special precautions for user</b>	None
<b>14.7 Maritime transport in bulk according to IMO instruments</b>	Not regulated

**ADR/RID**

<b>14.1 UN number</b>	Not regulated
<b>14.2 UN proper shipping name</b>	Not regulated
<b>14.3 Transport hazard class(es)</b>	Not regulated
<b>14.4 Packing group</b>	Not regulated
<b>14.5 Environmental hazards</b>	None
<b>14.6 Special precautions for user</b>	None

**IATA**

14.1 UN number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	None
14.6 Special precautions for user	None

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)**

Chemical name	Candidate List of Substances of Very High Concern for Authorization Information	REACH Annex XVII
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether (10 - 20%)	Reason for inclusion Endocrine disrupting properties, Article 57f - environment	-

**SEVESO Directive Information**

This product does not contain substances identified in the SEVESO Directive.

**International inventories**

TSCA 8(b)	-
DSL/NDSL	-
EINECS/ELINCS	-
ENCS	-
IECSC	-
KECL	-
PICCS	-
AICS	-

**International inventories 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

**15.2. Chemical safety assessment**

For this substance a chemical safety assessment has not been carried out

**SECTION 16: Other information****Full text of H-Statements referred to under Sections 2 and 3**

H315 - Causes skin irritation  
 H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage  
H412 - Harmful to aquatic life with long lasting effects

**Classification procedure:** Calculation method. Bridging principle "Dilution".  
**Issuing Date:** 2018-01-19  
**Revision Date:** 2025-02-19

**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.