

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

Product No	7132
Product name	PathScan® Total Akt1 Chemiluminescent Sandwich ELISA Kit
Kit Component	97329: Akt Rabbit mAb Coated Microwells 13080: Akt1 Mouse Detection mAb 13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated) 14621: Green Detection Antibody Diluent 2 13515: HRP Diluent 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

Chemical name	Index No.	CAS No
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

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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.

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 1 - (H318)
Skin sensitization	Category 1 - (H317)
Chronic aquatic toxicity	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.

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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

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)	no data available

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				Aquatic Chronic 1 (H410) (EUH032)	
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Kit Component 9803: Cell Lysis Buffer (10X)

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

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 14621: Green Detection Antibody Diluent 2

Chemical name	CAS No	Weight-%	EC No	Classification	REACH
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				(1272/2008)	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

97329: Akt 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

General advice Use first aid treatment according to the nature of the injury. When symptoms persist or in all cases of doubt seek medical advice.

Inhalation 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.

Skin contact 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.

Eye contact In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Ingestion Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Protection of first-aiders 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

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Unsuitable Extinguishing Media 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

For non-emergency personnel	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.
For emergency responders	Use personal protection recommended in Section 8.
Other information	Refer to protective measures listed in Sections 7 and 8.

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

Occupational exposure limit values					
Chemical name	European Union	United Kingdom	France	Spain	Germany

Ethylene glycol	TWA 20 ppm TWA 52 mg/m ³ STEL 40 ppm STEL 104 mg/m ³ S*	STEL 40 ppm STEL 104 mg/m ³ STEL 30 mg/m ³ TWA 10 mg/m ³ TWA 20 ppm TWA 52 mg/m ³ Skin	TWA 20 ppm TWA 52 mg/m ³ STEL 40 ppm STEL 104 mg/m ³ P*	TWA 20 ppm TWA 52 mg/m ³ STEL 40 ppm STEL 104 mg/m ³ S*	TWA: 10 ppm TWA: 26 mg/m ³ Skin Ceiling / Peak: 20 ppm Ceiling / Peak: 52 mg/m ³ H*
tetrasodium pyrophosphate, decahydrate		STEL 15 mg/m ³ TWA 5 mg/m ³	TWA 5 mg/m ³		
sodium azide	TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ S*	STEL 0.3 mg/m ³ TWA 0.1 mg/m ³ Skin	TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ P*	TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ S*	TWA: 0.2 mg/m ³ Ceiling / Peak: 0.4 mg/m ³
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one					Ceiling / Peak: 0.4 mg/m ³ TWA: 0.2 mg/m ³
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Ethylene glycol	TWA 20 ppm TWA 52 mg/m ³ STEL 40 ppm STEL 104 mg/m ³ Pelle*	TWA 20 ppm TWA 52 mg/m ³ STEL 40 ppm STEL 104 mg/m ³ Ceiling 100 mg/m ³ C(A4) P*	Huid* STEL 40 ppm STEL 104 mg/m ³ TWA 52 mg/m ³ TWA 10 mg/m ³	TWA 20 ppm TWA 50 mg/m ³ STEL 40 ppm STEL 100 mg/m ³ iho*	TWA 10 ppm TWA 26 mg/m ³ TWA 10 mg/m ³ STEL 104 mg/m ³ STEL 40 ppm STEL 20 mg/m ³ H*
tetrasodium pyrophosphate, decahydrate					TWA 5 mg/m ³ STEL 10 mg/m ³
sodium azide	TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ Pelle*	TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ Ceiling 0.29 mg/m ³ Ceiling 0.11 ppm C(A4) P*	Huid* STEL 0.3 mg/m ³ TWA 0.1 mg/m ³	TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ iho*	TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ H*
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Ethylene glycol	H* STEL 20 ppm STEL 52 mg/m ³ TWA 10 ppm TWA 26 mg/m ³	SS-C** H* TWA 10 ppm TWA 26 mg/m ³ STEL 20 ppm STEL 52 mg/m ³	TWA 15 mg/m ³ STEL 50 mg/m ³	TWA 20 ppm TWA 52 mg/m ³ S* STEL 104 mg/m ³ STEL 40 ppm	TWA 20 ppm TWA 52 mg/m ³ STEL 40 ppm STEL 104 mg/m ³ Skin
tetrasodium pyrophosphate, decahydrate	STEL 10 mg/m ³ TWA 5 mg/m ³	TWA 5 mg/m ³		TWA 5 mg/m ³ STEL 10 mg/m ³	TWA 5 mg/m ³ STEL 15 mg/m ³
sodium azide	H* STEL 0.3 mg/m ³ TWA 0.1 mg/m ³	TWA 0.2 mg/m ³ STEL 0.4 mg/m ³	TWA 0.1 mg/m ³ STEL 0.3 mg/m ³	TWA 0.1 mg/m ³ STEL 0.3 mg/m ³	TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ Skin
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one	TWA 0.05 mg/m ³ Sh/Sah**	SS-C** S+ TWA 0.2 mg/m ³ STEL 0.4 mg/m ³			

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	84850: Luminol/Enhancer Solution
Physical state	Liquid
Appearance	Clear
Color	Colorless or Light pink
pH	9.5 (20 °C)
Solubility	Soluble in water

Kit Component	42552: Stable Peroxide Buffer
Physical state	Liquid
Appearance	Clear
Color	Colorless
pH	4.9 - 5.1 (20 °C)

Kit Component	9801: ELISA Wash Buffer (20X)
Physical state	Liquid
Appearance	Clear
Color	Colorless
pH	6.4 (20 °C)

Kit Component	11083: ELISA Sample Diluent
Physical state	Liquid
Appearance	Clear
Color	Blue
pH	7.1 (20 °C)

Kit Component	9803: Cell Lysis Buffer (10X)
Physical state	Liquid
Color	Colorless
pH	7.5 (20 °C)

Kit Component	13080: Akt1 Mouse Detection mAb
Physical state	Solid
Appearance	Lyophilized, Powder
Color	Green

Kit Component	13339: Detection Antibody Diluent
Physical state	Liquid
Appearance	Clear
Color	Green
pH	7.4 (20 °C)

Kit Component	13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)
Physical state	Solid
Appearance	Lyophilized, Powder
Color	Red

Kit Component	13515: HRP Diluent
Physical state	Liquid

Appearance	Clear
Color	Red
pH	7.4 (20 °C)

Kit Component	14621: Green Detection Antibody Diluent 2
Physical state	Liquid
Appearance	Clear
Color	Green
pH	7.4 (20 °C)

Kit Component	97329: Akt Rabbit mAb Coated Microwells
Physical state	Solid
Appearance	Microwell Plate

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

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 (NO_x)
Carbon oxides (CO_x)

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

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

Eye contact

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

Skin contact

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

Ingestion

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

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

Sensitization

Kit Component Skin Sensitization	9801: ELISA Wash Buffer (20X) Product is or contains a sensitizer. May cause an allergic skin reaction
Kit Component Respiratory Sensitization Skin Sensitization	13080: Akt1 Mouse Detection mAb May cause allergy or asthma symptoms or breathing difficulties if inhaled May cause skin sensitization

Kit Component
Respiratory Sensitization
Skin Sensitization

13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause skin sensitization

Kit Component
Skin Sensitization

13515: HRP Diluent
Product is or contains a sensitizer. May cause an allergic skin reaction

Mutagenic effects No information available.

Carcinogenic effects No information available

Reproductive toxicity No information available.

Systemic Target Organ Toxicity (STOT)

Kit Component
STOT - repeated exposure
Target Organ Effects

84850: Luminol/Enhancer Solution
May cause damage to organs through prolonged or repeated exposure
Kidney

Aspiration Hazard No information available.

11.2. Information on other hazards

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Product Information

Kit Component
Ecotoxicity

9801: ELISA Wash Buffer (20X)
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	LC100 1 mg/L (Orconectes rusticus) 96 h

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		macrochirus) 96 h LC50 5.46 mg/L (Pimephales promelas) 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	>=-0.32 - <=0.7

12.4. Mobility in soil

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

Waste from residues / unused products	Dispose of in accordance with local regulations.
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Contaminated packaging Do not re-use empty containers.

Other information Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

IMDG/IMO

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
 14.7 Maritime transport in bulk according to IMO instruments Not regulated

ADR/RID

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

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".
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Disclaimer

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