

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

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

**Revision Date:** 2024-07-23

**Version:** 3

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

### 1.1. Product identifier

<b>Product No</b>	7930
<b>Product name</b>	PathScan® Total Akt2 Sandwich ELISA Kit
<b>Kit Component</b>	56797: Akt Rabbit mAb Coated Microwells 13755: Akt2 Mouse Detection mAb 13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated) 14621: Green Detection Antibody Diluent 2 13515: HRP Diluent 11083: ELISA Sample Diluent 7002: STOP Solution 7004: TMB Substrate 9801: ELISA Wash Buffer (20X) 9803: Cell Lysis Buffer (10X)

### Hazardous Components

**13515: HRP Diluent**  
**7002: STOP Solution**  
**9801: ELISA Wash Buffer (20X)**  
**9803: Cell Lysis Buffer (10X)**

### Contains

<b>Chemical name</b>	<b>Index No.</b>	<b>CAS No</b>
polyethylene glycol	Not Listed	9002-93-1
p-(1,1,3,3-tetramethylbutyl)phenylether (10 - 20%)		
maleic acid (0 - 10%)	607-095-00-3	110-16-7
tetrasodium pyrophosphate, decahydrate (0 - 10%)	Not Listed	13472-36-1
sodium azide (0 - 10%)	011-004-00-7	26628-22-8
reaction mass of:	613-167-00-5	55965-84-9
5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1) (0 - 10%)		

### 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 1 - (H314)
<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)**

H314 - Causes severe skin burns and eye damage.  
H317 - May cause an allergic skin reaction.  
H412 - Harmful to aquatic life with long lasting effects.

**Precautionary statement(s)**

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.  
P264 - Wash face, hands and any exposed skin thoroughly after handling.  
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.  
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
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.  
P405 - Store locked up.  
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 7002: STOP Solution

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
maleic acid	110-16-7	3-7	203-742-5	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) STOT SE 3 (H335)	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-isothi- azolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)	55965-84-9	0.005-0.025	-	Acute Tox. 3 (H301) Acute Tox. 2 (H310) Acute Tox. 3 (H311) Acute Tox. 2 (H330) Skin Corr. 1C (H314) Skin Corr. 1B (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)

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**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 serious eye damage. Causes skin irritation. Harmful to aquatic life with long lasting effects.

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	-	Acute Tox. 4(H302) 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 14621: Green Detection Antibody Diluent 2**

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 [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	55965-84-9	0.005-0.025	-	Acute Tox. 3 (H301) Acute Tox. 2 (H310) Acute Tox. 3 (H311) Acute Tox. 2 (H330) Skin Corr. 1C (H314) Skin Corr. 1B (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

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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**

- 56797: Akt Rabbit mAb Coated Microwells**
- 13755: Akt2 Mouse Detection mAb**
- 13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)**
- 7004: TMB Substrate**

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. 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>	Get medical attention. 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. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. 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 Carbon dioxide (CO <sub>2</sub> ) Foam Water spray Dry powder
<b>Unsuitable Extinguishing Media</b>	No information available

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

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes.

**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** Avoid contact with skin, eyes and clothing. Use personal protective equipment. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.  
**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. Prevent product from entering drains.

**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** Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

**6.4. Reference to other sections**

See Sections 8 & 13 for additional information.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Handle in accordance with good industrial hygiene and safety practice. 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

tetrasodium pyrophosphate, decahydrate		STEL 15 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>	
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 [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)					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>
tetrasodium pyrophosphate, decahydrate					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> 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> H*
<b>Chemical name</b>	<b>Austria</b>	<b>Switzerland</b>	<b>Poland</b>	<b>Norway</b>	<b>Ireland</b>
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>
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 0.1 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 [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	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

#### 56797: Akt Rabbit mAb Coated Microwells

Solid

Microwell Plate

<b>Kit Component</b>	<b>13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)</b>
Physical state	Solid
Appearance	Powder, Lyophilized
Color	Red
<b>Kit Component</b>	<b>13755: Akt2 Mouse Detection mAb</b>
Physical state	Solid
Appearance	Powder, Lyophilized
Color	Green
pH	7.4 (20 °C)
<b>Kit Component</b>	<b>7002: STOP Solution</b>
Physical state	Liquid
Appearance	Clear
Color	Colorless
pH	1.2 (20 °C)
<b>Kit Component</b>	<b>7004: TMB Substrate</b>
Physical state	Liquid
Appearance	Clear
Color	Light yellow
pH	3.3-3.8 (20 °C)
<b>Kit Component</b>	<b>9801: ELISA Wash Buffer (20X)</b>
Physical state	Liquid
Appearance	Clear
Color	Colorless
pH	6.4 (20 °C)
<b>Kit Component</b>	<b>9803: Cell Lysis Buffer (10X)</b>
Physical state	Liquid
Appearance	Clear
Color	Colorless
pH	7.5 (20 °C)
<b>Kit Component</b>	<b>11083: ELISA Sample Diluent</b>
Physical state	Liquid
Appearance	Clear
Color	Blue
pH	7.1 (20 °C)
<b>Kit Component</b>	<b>14621: Green Detection Antibody Diluent 2</b>
Physical state	Liquid
Appearance	Clear
Color	Green
pH	7.4 (20°C)
<b>Kit Component</b>	<b>13515: HRP Diluent</b>
Physical state	Liquid
Appearance	Clear
Color	Red
pH	7.4 (20°C)

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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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

**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	= 1800 mg/kg (Rat)	-	-
maleic acid	708 mg/kg (Rat)	1,560 mg/kg (Rabbit)	> 0.72 mg/L (Rat) 1h
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 [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	= 53 mg/kg (Rat) = 481 mg/kg (Rat) 232 - 249 mg/kg (Rat) = 120 mg/kg (Rat)	= 200 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

**13755: Akt2 Mouse Detection mAb**  
May cause allergic respiratory reaction

**Kit Component**

**13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)**

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Inhalation May cause allergic respiratory reaction

**Kit Component**

Inhalation

**7002: STOP Solution**

Aerosol expected to be irritating based on components

**Kit Component**

Inhalation

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

Avoid breathing vapors or mists May cause irritation of respiratory tract

**Kit Component**

Inhalation

**13515: HRP Diluent**

Avoid breathing vapors or mists May cause irritation of respiratory tract

### Eye contact

**Kit Component**

Eye contact

**13515: HRP Diluent**

Contact with eyes may cause irritation

**Kit Component**

Eye contact

**7002: STOP Solution**

May cause irreversible damage to eyes

**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

### Skin contact

**Kit Component**

Skin contact

**13755: Akt2 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

**Kit Component**

Skin contact

**7002: STOP Solution**

Corrosive to skin Prolonged contact with skin is harmful

**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

### Ingestion

**Kit Component**

Ingestion

**7002: STOP Solution**

Ingestion causes burns of the upper digestive and respiratory tract. Harmful if swallowed

**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

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**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. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. 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>7002: STOP Solution</b> Risk of serious damage to eyes Causes burns
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<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> Respiratory Sensitization Skin Sensitization	<b>13755: Akt2 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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<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> Skin Sensitization	<b>7002: STOP Solution</b> May cause skin sensitization
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**Mutagenic effects**

<b>Kit Component</b> Mutagenic effects	<b>7002: STOP Solution</b> Not mutagenic in AMES Test
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**Carcinogenic effects**

No component of this product present at levels greater than or equal to 0.1% are known or suspected carcinogens.

**Reproductive toxicity**

No information available.

**Systemic Target Organ Toxicity (STOT)**

**Kit Component**  
STOT - repeated exposure  
STOT - single exposure

**7002: STOP Solution**  
May cause damage to organs through prolonged or repeated exposure  
Respiratory system

**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

**7002: STOP Solution**  
Toxic to aquatic life

**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
maleic acid	-	LC50 5 mg/L (Pimephales promelas) 96 h	EC50 250 - 400 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 5.46 mg/L (Pimephales promelas) 96 h LC50 0.7 mg/L (Lepomis macrochirus) 96 h	LC100 1 mg/L (Orconectes rusticus) 96 h
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	EC50 0.11 - 0.16 mg/L (Pseudokirchneriella subcapitata) 72 h EC50 0.31 mg/L (Anabaena flos-aquae) 120 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 0.71 - 0.99 mg/L (Daphnia magna) 48 h EC50 0.12 - 0.3 mg/L (Daphnia magna) 48 h

### 12.2. Persistence and degradability

**Kit Component**  
Persistence and degradability

**7002: STOP Solution**  
Product is biodegradable

**Kit Component**  
Persistence and degradability

**9801: ELISA Wash Buffer (20X)**  
Not readily biodegradable

### 12.3. Bioaccumulative potential

**Kit Component**  
Bioaccumulation

**7002: STOP Solution**  
Not likely to bioaccumulate

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

Chemical name	Octanol-Water Partition Coefficient
maleic acid	0.32

#### 12.4. Mobility in soil

**Kit Component**                      **7002: STOP Solution**  
 Mobility                                      Will likely be mobile in the environment due to its water solubility

**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.

**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

This material is subject to regulation as a hazardous material for shipping:

#### IMDG/IMO

**14.1 UN number**                      UN3265  
**14.2 UN proper shipping name**                      Corrosive liquid, acidic, organic, n.o.s. (maleic acid)  
**14.3 Transport hazard class(es)**                      8  
**14.4 Packing group**                      III  
**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	UN3265
14.2 UN proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (maleic acid)
14.3 Transport hazard class(es)	8
14.4 Packing group	III
14.5 Environmental hazards	None
14.6 Special precautions for user	None

**IATA**

14.1 UN number	UN3265
14.2 UN proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (maleic acid)
14.3 Transport hazard class(es)	8
14.4 Packing group	III
14.5 Environmental hazards	None
14.6 Special precautions for user	None

<b>SECTION 15: Regulatory information</b>
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**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**

<b>TSCA</b>	- United States Toxic Substances Control Act Section 8(b) Inventory
<b>DSL/NDSL</b>	- Canadian Domestic Substances List/Non-Domestic Substances List
<b>EINECS/ELINCS</b>	- European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
<b>ENCS</b>	- Japan Existing and New Chemical Substances
<b>IECSC</b>	- China Inventory of Existing Chemical Substances
<b>KECL</b>	- Korean Existing and Evaluated Chemical Substances
<b>PICCS</b>	- Philippines Inventory of Chemicals and Chemical Substances
<b>AICS</b>	- 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**

H300 - Fatal if swallowed  
H301 - Toxic if swallowed  
H302 - Harmful if swallowed  
H310 - Fatal in contact with skin  
H311 - Toxic in contact with skin  
H314 - Causes severe skin burns and eye damage  
H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H318 - Causes serious eye damage  
H319 - Causes serious eye irritation  
H330 - Fatal if inhaled  
H335 - May cause respiratory irritation  
H400 - Very toxic to aquatic life  
H410 - Very toxic to aquatic life with long lasting effects  
H411 - Toxic to aquatic life with long lasting effects  
H412 - Harmful to aquatic life with long lasting effects  
EUH032 - Contact with acids liberates very toxic gas  
EUH071 - Corrosive to the respiratory tract

**Classification procedure:** Calculation method. Bridging principle "Dilution".

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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.**