

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

**Issuing Date:** 2018-07-16

**Revision Date:** 2024-06-10

**Version:** 3

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

### 1.1. Product identifier

<b>Product No</b>	15942
<b>Product name</b>	FastScan™ Total Akt1 ELISA Kit
<b>Kit Component</b>	18493: Akt1 Mouse Capture mAb 38676: Akt Rabbit HRP-linked mAb 9801: ELISA Wash Buffer (20X) 7004: TMB Substrate 7002: STOP Solution 16076: FastScan™ ELISA Capture Antibody Diluent 28120: FastScan™ ELISA HRP Antibody Diluent 69905: FastScan™ ELISA Cell Extraction Buffer (5X) 25243: FastScan™ ELISA Cell Extraction Enhancer Solution (50X) 29917: FastScan™ ELISA Kit #15942 Positive Control Type 2

### Hazardous Components

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

**7002: STOP Solution**

**16076: FastScan™ ELISA Capture Antibody Diluent**

**28120: FastScan™ ELISA HRP Antibody Diluent**

**69905: FastScan™ ELISA Cell Extraction Buffer (5X)**

**25243: FastScan™ ELISA Cell Extraction Enhancer Solution (50X)**

### Contains

<b>Chemical name</b>	<b>Index No.</b>	<b>CAS No</b>
maleic acid (0 - 10%)	607-095-00-3	110-16-7
sodium dodecyl sulphate (0 - 10%)	Not Listed	151-21-3
polyethylene glycol	Not Listed	9002-93-1
p-(1,1,3,3-tetramethylbutyl)phenylether (0 - 10%)		
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

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**SECTION 2: Hazards identification**

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**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

#### 16076: FastScan™ ELISA Capture Antibody 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	0.0025-0.0125	-	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)

### Kit Component

#### 28120: FastScan™ ELISA HRP Antibody 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.	55965-84-9	0.0015	-	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)	no data available

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220-239-6] (3:1)				Skin Sens. 1A (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) (EUH071)	
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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 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).

**Kit Component 69905: FastScan™ ELISA Cell Extraction Buffer (5X)**

WARNING: Causes serious eye damage. May cause an allergic skin reaction. 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-tetramethylbut yl)phenylether	9002-93-1	1-<3	618-344-0	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 2 (H411)	no data available
reaction mass of: 5-chloro-2-methyl-4-isothi azolin-3-one [EC no.	55965-84-9	0.0025-0.0125	-	Acute Tox. 3 (H301) Acute Tox. 2 (H310) Acute Tox. 3 (H311) Acute Tox. 2 (H330)	no data available

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247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)				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)	
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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). Polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether is a suspected endocrine disruptor.

### Kit Component **25243: FastScan™ ELISA Cell Extraction Enhancer Solution (50X)**

WARNING: Causes serious eye irritation. May cause an allergic skin reaction.

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
sodium dodecyl sulphate	151-21-3	1-3	205-788-1	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Acute Tox. 4 (H302) Acute Tox. 3 (H311)	no data available
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	0.001-0.005	-	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)

### Kit Component **18493: Akt1 Mouse Capture mAb** **38676: Akt Rabbit HRP-linked mAb** **7004: TMB Substrate** **29917: FastScan™ ELISA Kit #15942 Positive Control Type 2**

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

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General advice

Call a doctor immediately if allergic signs, particularly in the respiratory tract, are observed.

#### Inhalation

Immediate medical attention is required. May cause allergic respiratory reaction. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately if symptoms occur. Administer oxygen if breathing is difficult. If not breathing, give artificial respiration.

#### Skin contact

Immediate medical attention is required. Wash off immediately with soap and plenty of

**Eye contact** water removing all contaminated clothes and shoes. May cause an allergic skin reaction. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Consult a physician.

**Ingestion** Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without medical advice. If symptoms persist, call a physician. Never give anything by mouth to an unconscious person.

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

Skin irritation. Eye irritation. Respiratory irritation. May cause an allergic skin reaction including itching, redness, and rash. May cause allergic respiratory reaction. Significant esophageal or gastrointestinal tract irritation or burns may occur following ingestion. Respiratory tract irritation, if severe, can progress to pulmonary edema which may be delayed in onset up to 24 to 72 hours after exposure in some cases.

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

**Notes to physician** May cause sensitization by inhalation and skin contact. 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 and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes. Product is or contains a sensitizer.

#### **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. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Avoid dust formation.

**For emergency responders** Use personal protection recommended in Section 8.

#### **6.2. Environmental precautions**

Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Do not allow material to contaminate ground water system. Should not be released into the environment.

#### **6.3. Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so. Prevent dust cloud.

**Methods for cleaning up** Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. Prevent product from entering drains.

#### **6.4. Reference to other sections**

See Sections 8 & 13 for additional information.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Avoid dust formation.

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

Keep container tightly closed in a dry and well-ventilated place. Protect from light.

### 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
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>
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
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

Safety glasses with side-shields

##### Skin protection

Wear protective gloves and protective clothing

##### Hand protection

Impervious gloves

##### Other

Wear suitable protective clothing.

##### Respiratory protection

In case of inadequate ventilation wear respiratory protection

#### 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.

<b>Kit Component</b>	<b>18493: Akt1 Mouse Capture mAb</b>
Physical state	Solid
Appearance	Lyophilized, Powder
Color	Green
<b>Kit Component</b>	<b>38676: Akt Rabbit HRP-linked mAb</b>
Physical state	Solid
Appearance	Lyophilized, Powder
Color	Red
<b>Kit Component</b>	<b>16076: FastScan™ ELISA Capture Antibody Diluent</b>
Physical state	Liquid
Appearance	Clear
Color	Green
pH	7.4
Remarks	@ 20 °C
<b>Kit Component</b>	<b>28120: FastScan™ ELISA HRP Antibody Diluent</b>
Physical state	Liquid
Color	Brown
pH	6.8-7.2
Remarks	@ 20 °C
Boiling point/range (°C) VALUE	100
Boiling point/range (°F) VALUE	212
Solubility	Soluble in water
<b>Kit Component</b>	<b>7004: TMB Substrate</b>
Physical state	Liquid
Appearance	Clear
Color	Light yellow
pH	3.3-3.8
Remarks	@ 20 °C
<b>Kit Component</b>	<b>7002: STOP Solution</b>
Physical state	Liquid
Appearance	Clear
Color	Colorless
pH	1.2
Remarks	@ 20 °C
<b>Kit Component</b>	<b>9801: ELISA Wash Buffer (20X)</b>
Physical state	Liquid
Appearance	Clear
Color	Colorless
pH	6.4
Remarks	@ 20 °C
<b>Kit Component</b>	<b>69905: FastScan™ ELISA Cell Extraction Buffer (5X)</b>
Physical state	Liquid
Appearance	Clear
Color	light yellow
pH	7
Remarks	@ 20 °C

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<b>Kit Component</b>	<b>25243: FastScan™ ELISA Cell Extraction Enhancer Solution (50X)</b>
Physical state	Liquid
Appearance	Clear
Color	Colorless
<b>Kit Component</b>	<b>29917: FastScan™ ELISA Kit #15942 Positive Control Type 2</b>
Physical state	Solid
Appearance	Lyophilized, Powder
Color	White

## 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

<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous reactions</b>	None under normal processing

### 10.4. Conditions to avoid

Excessive heat. Exposure to air or moisture over prolonged periods.

### 10.5. Incompatible materials

Acids, Alkalis, Strong acids, Strong bases, Strong oxidizing agents, Strong reducing agents, Metals.

### 10.6. Hazardous decomposition products

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

## SECTION 11: Toxicological information

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

#### **Product 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
maleic acid	708 mg/kg ( Rat )	1,560 mg/kg ( Rabbit )	> 0.72 mg/L ( Rat ) 1h
sodium dodecyl sulphate	= 1288 mg/kg (Rat)	= 200 mg/kg ( Rabbit )	> 3900 mg/m <sup>3</sup> ( Rat ) 1 h
polyethylene glycol	= 1800 mg/kg (Rat)	-	-
p-(1,1,3,3-tetramethylbutyl)phenylet			

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her			
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

<b>Kit Component</b> Inhalation	<b>18493: Akt1 Mouse Capture mAb</b> May cause allergic respiratory reaction
<b>Kit Component</b> Inhalation	<b>38676: Akt Rabbit HRP-linked mAb</b> May cause allergic respiratory reaction
<b>Kit Component</b> Inhalation	<b>28120: FastScan™ ELISA HRP Antibody Diluent</b> May cause irritation of respiratory tract
<b>Kit Component</b> Inhalation	<b>7002: STOP Solution</b> Aerosol expected to be irritating based on components
<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>69905: FastScan™ ELISA Cell Extraction Buffer (5X)</b> May cause irritation of respiratory tract

#### Eye contact

<b>Kit Component</b> Eye contact	<b>18493: Akt1 Mouse Capture mAb</b> May cause slight irritation
<b>Kit Component</b> Eye contact	<b>38676: Akt Rabbit HRP-linked mAb</b> May cause slight irritation
<b>Kit Component</b> Eye contact	<b>28120: FastScan™ ELISA HRP Antibody Diluent</b> May cause temporary eye irritation
<b>Kit Component</b> Eye contact	<b>7002: STOP Solution</b> May cause irreversible damage to eyes
<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>69905: FastScan™ ELISA Cell Extraction Buffer (5X)</b> May cause irritation
<b>Kit Component</b> Eye contact	<b>25243: FastScan™ ELISA Cell Extraction Enhancer Solution (50X)</b> May cause irritation

#### Skin contact

<b>Kit Component</b> Skin contact	<b>18493: Akt1 Mouse Capture mAb</b> Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
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<b>Kit Component</b> Skin contact	<b>38676: Akt Rabbit HRP-linked mAb</b> Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
<b>Kit Component</b> Skin contact	<b>16076: FastScan™ ELISA Capture Antibody Diluent</b> Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
<b>Kit Component</b> Skin contact	<b>28120: FastScan™ ELISA HRP Antibody Diluent</b> May cause irritation
<b>Kit Component</b> Skin contact	<b>7002: STOP Solution</b> Corrosive to skin Prolonged contact with skin is harmful
<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>25243: FastScan™ ELISA Cell Extraction Enhancer Solution (50X)</b> May cause sensitization by skin contact

**Ingestion**

<b>Kit Component</b> Ingestion	<b>18493: Akt1 Mouse Capture mAb</b> Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea
<b>Kit Component</b> Ingestion	<b>38676: Akt Rabbit HRP-linked mAb</b> Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea
<b>Kit Component</b> Ingestion	<b>28120: FastScan™ ELISA HRP Antibody Diluent</b> Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea
<b>Kit Component</b> Ingestion	<b>7002: STOP Solution</b> Ingestion causes burns of the upper digestive and respiratory tract. Harmful if swallowed
<b>Kit Component</b> Ingestion	<b>9801: ELISA Wash Buffer (20X)</b> Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea
<b>Kit Component</b> Ingestion	<b>69905: FastScan™ ELISA Cell Extraction Buffer (5X)</b> Ingestion may cause irritation to mucous membranes

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

**Symptoms** Skin irritation. Eye irritation. Respiratory irritation. May cause an allergic skin reaction including itching, redness, and rash. May cause allergic respiratory reaction. Significant esophageal or gastrointestinal tract irritation or burns may occur following ingestion. Respiratory tract irritation, if severe, can progress to pulmonary edema which may be delayed in onset up to 24 to 72 hours after exposure in some cases.

**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
<b>Kit Component</b> Serious eye damage/eye irritation	<b>9801: ELISA Wash Buffer (20X)</b> Causes serious eye irritation

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Skin corrosion/irritation Causes skin irritation

**Sensitization**

<p><b>Kit Component</b> Respiratory Sensitization Skin Sensitization</p>	<p><b>18493: Akt1 Mouse Capture mAb</b> Respiratory Sensitizer May cause skin sensitization</p>
<p><b>Kit Component</b> Respiratory Sensitization Skin Sensitization</p>	<p><b>38676: Akt Rabbit HRP-linked mAb</b> Respiratory Sensitizer May cause skin sensitization</p>
<p><b>Kit Component</b> Skin Sensitization</p>	<p><b>16076: FastScan™ ELISA Capture Antibody Diluent</b> As a precaution the product should be treated as a sensitizer</p>
<p><b>Kit Component</b> Skin Sensitization</p>	<p><b>28120: FastScan™ ELISA HRP Antibody Diluent</b> May cause skin sensitization</p>
<p><b>Kit Component</b> Skin Sensitization</p>	<p><b>7002: STOP Solution</b> May cause skin sensitization</p>
<p><b>Kit Component</b> Skin Sensitization</p>	<p><b>9801: ELISA Wash Buffer (20X)</b> Product is or contains a sensitizer. May cause an allergic skin reaction</p>
<p><b>Kit Component</b> Skin Sensitization</p>	<p><b>69905: FastScan™ ELISA Cell Extraction Buffer (5X)</b> As a precaution the product should be treated as a sensitizer</p>
<p><b>Kit Component</b> Skin Sensitization</p>	<p><b>25243: FastScan™ ELISA Cell Extraction Enhancer Solution (50X)</b> As a precaution the product should be treated as a sensitizer</p>

**Mutagenic effects**

<p><b>Kit Component</b> Mutagenic effects</p>	<p><b>7002: STOP Solution</b> Not mutagenic in AMES Test</p>
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**Carcinogenic effects** No information available

**Reproductive toxicity** No information available.

**Systemic Target Organ Toxicity (STOT)**

<p><b>Kit Component</b> STOT - single exposure</p>	<p><b>7002: STOP Solution</b> Respiratory system</p>
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**Aspiration Hazard** No information available.

**11.2. Information on other hazards**

**Other adverse effects** No information available.

<b>SECTION 12: Ecological information</b>
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**12.1. Toxicity**

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**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
maleic acid	-	LC50 5 mg/L (Pimephales promelas) 96 h	EC50 250 - 400 mg/L (Daphnia magna) 48 h
sodium dodecyl sulphate	EC50 53 mg/L (Desmodesmus subspicatus) 72 h EC50 30 - 100 mg/L (Desmodesmus subspicatus) 96 h EC50 42 mg/L (Desmodesmus subspicatus) 96 h EC50 3.59 - 15.6 mg/L (Pseudokirchneriella subcapitata) 96 h EC50 117 mg/L (Pseudokirchneriella subcapitata) 96 h	LC50 8 - 12.5 mg/L (Pimephales promelas) 96 h LC50 4.1 mg/L (Leuciscus idus) 48 h LC50 22.1 - 22.8 mg/L (Pimephales promelas) 96 h LC50 4.3 - 8.5 mg/L (Oncorhynchus mykiss) 96 h LC50 4.62 mg/L (Oncorhynchus mykiss) 96 h LC50 4.2 mg/L (Oncorhynchus mykiss) 96 h LC50 7.97 mg/L (Brachydanio rerio) 96 h LC50 9.9 - 20.1 mg/L (Brachydanio rerio) 96 h LC50 4.06 - 5.75 mg/L (Lepomis macrochirus) 96 h LC50 4.2 - 4.8 mg/L (Lepomis macrochirus) 96 h LC50 4.5 mg/L (Lepomis macrochirus) 96 h LC50 5.8 - 7.5 mg/L (Pimephales promelas) 96 h LC50 10.2 - 22.5 mg/L (Pimephales promelas) 96 h LC50 6.2 - 9.6 mg/L (Pimephales promelas) 96 h LC50 13.5 - 18.3 mg/L (Poecilia reticulata) 96 h LC50 10.8 - 16.6 mg/L (Poecilia reticulata) 96 h LC50 1.31 mg/L (Cyprinus carpio) 96 h LC50 15 - 18.9 mg/L (Pimephales promelas) 96 h	EC50 21.2 mg/L (Daphnia magna) 24 h EC50 1.8 mg/L (Daphnia magna) 48 h
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
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

**16076: FastScan™ ELISA Capture Antibody Diluent**  
Not readily biodegradable

**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**

<b>Kit Component</b>	<b>7002: STOP Solution</b>
Bioaccumulation	Not likely to bioaccumulate
Bioconcentration factor (BCF)	11 (maleic acid)

<b>Kit Component</b>	<b>9801: ELISA Wash Buffer (20X)</b>
Bioaccumulation	Not likely to bioaccumulate

Chemical name	Octanol-Water Partition Coefficient
maleic acid	0.32
sodium dodecyl sulphate	1.6

**12.4. Mobility in soil**

<b>Kit Component</b>	<b>7002: STOP Solution</b>
Mobility	Will likely be mobile in the environment due to its water solubility

<b>Kit Component</b>	<b>9801: ELISA Wash Buffer (20X)</b>
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**

<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal.
<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

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  
**Excepted Quantity** E1

**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 (0 - 10%)	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**

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  
EUH071 - Corrosive to the respiratory tract

**Classification procedure:** Expert judgment and weight of evidence determination.  
**Issuing Date:** 2018-07-16  
**Revision Date:** 2024-06-10

#### **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.**