

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

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

**Revision Date:** 2024-07-11

**Version:** 3

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

### 1.1. Product identifier

<b>Product No</b>	45057
<b>Product name</b>	FastScan™ Phospho-Bad (Ser136) ELISA Kit
<b>Kit Component</b>	27139: Bad Rabbit Capture mAb 23922: Phospho-Bad (Ser136) 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) 57025: FastScan™ ELISA Kit #45057 Positive Control Type 1

### Hazardous Components

**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)**  
**9801: ELISA Wash Buffer (20X)**  
**7002: STOP Solution**

### 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
sodium fluoride (0 - 10%)	009-004-00-7	7681-49-4
trisodium tetraoxovanadate (0 - 10%)	Not Listed	13721-39-6
polyethylene glycol	Not Listed	9002-93-1
p-(1,1,3,3-tetramethylbutyl)phenylether (0 - 10%)	-	329-98-6
alpha-toluenesulphonyl fluoride (0 - 10%)	-	55965-84-9
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) (0 - 10%)	613-167-00-5	

### 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

## 45057 FastScan™ Phospho-Bad (Ser136) ELISA Kit

### 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.

<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.

## 45057 FastScan™ Phospho-Bad (Ser136) ELISA Kit

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).

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. 220-239-6] (3:1)	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) Skin Sens. 1A (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	no data available

**45057 FastScan™ Phospho-Bad (Ser136) ELISA Kit**

				(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. 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)	no data available

**45057 FastScan™ Phospho-Bad (Ser136) ELISA Kit**

				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-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	0.001-0.005	-	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 57025: FastScan™ ELISA Kit #45057 Positive Control Type 1**

WARNING: 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	0.1-<1	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
sodium fluoride	7681-49-4	1-3	231-667-8	Acute Tox. 3 (H301) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) (EUH032)	no data available
trisodium tetraoxovanadate	13721-39-6	1-3	237-287-9	Acute Tox. 4 (H302)	no data available
alpha-toluenesulphonyl fluoride	329-98-6	0.1-<1	206-350-2	Acute Tox. 3 (301) Skin Corr. 1B (H314)	no data available
reaction mass of: 5-chloro-2-methyl-4-isothi azolin-3-one [EC no. 247-500-7] and	55965-84-9	0.0015-<0.06	-	Acute Tox. 3 (H301) Acute Tox. 2 (H310) Acute Tox. 3 (H311) Acute Tox. 2 (H330)	no data available

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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)

<b>Kit Component</b>	<b>27139: Bad Rabbit Capture mAb</b> <b>23922: Phospho-Bad (Ser136) Rabbit HRP-linked mAb</b> <b>7004: TMB Substrate</b>
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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

<b>General advice</b>	Call a doctor immediately if allergic signs, particularly in the respiratory tract, are observed.
<b>Inhalation</b>	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.
<b>Skin contact</b>	Immediate medical attention is required. Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. May cause an allergic skin reaction.
<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Consult a physician.
<b>Ingestion</b>	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

Contains kit components which may cause the following effects, refer to individual component SDSs for full information on 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.

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

<b>Notes to physician</b>	May cause sensitization by inhalation and skin contact. Treat symptomatically.
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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

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

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

Thermal decomposition can lead to release of irritating 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**

<b>For non-emergency personnel</b>	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.
<b>For emergency responders</b>	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**

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so. Prevent dust cloud.
<b>Methods for cleaning up</b>	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

## 45057 FastScan™ Phospho-Bad (Ser136) ELISA Kit

Chemical name	European Union	United Kingdom	France	Spain	Germany
sodium fluoride	TWA 2.5 mg/m <sup>3</sup>	STEL 7.5 mg/m <sup>3</sup> TWA 2.5 mg/m <sup>3</sup>	TWA 2 mg/m <sup>3</sup> TWA 2.5 mg/m <sup>3</sup>	TWA 2.5 mg/m <sup>3</sup>	TWA: 1 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)					Ceiling / Peak: 0.4 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup>
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
sodium fluoride	TWA 2.5 mg/m <sup>3</sup>	TWA 2.5 mg/m <sup>3</sup> C(A4)		TWA 2.5 mg/m <sup>3</sup>	TWA 2.5 mg/m <sup>3</sup>
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
sodium fluoride			TWA 2 mg/m <sup>3</sup>	TWA 0.5 mg/m <sup>3</sup> STEL 1.5 mg/m <sup>3</sup>	TWA 2.5 mg/m <sup>3</sup> STEL 7.5 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)	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>			

Chemical name	European Union	United Kingdom	France	Spain	Germany
sodium fluoride			3 10	2 3	Biologische Grenzwerte nach TRGS 903 sind zu beachten
trisodium tetraoxovanadate			0.05		
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
sodium fluoride		4			

### 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.

#### Kit Component

Physical state

Appearance

Color

#### 27139: Bad Rabbit Capture mAb

Solid

Lyophilized, Powder

Green

#### Kit Component

Physical state

#### 23922: Phospho-Bad (Ser136) Rabbit HRP-linked mAb

Solid



## 45057 FastScan™ Phospho-Bad (Ser136) ELISA Kit

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Appearance Lyophilized, Powder  
Color Red

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

Physical state Liquid  
Appearance Clear  
Color Green  
pH 7.4  
Remarks @ 20 °C

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

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

**Kit Component 7004: TMB Substrate**

Physical state Liquid  
Appearance Clear  
Color Light yellow  
pH 3.3-3.8  
Remarks @ 20 °C

**Kit Component 7002: STOP Solution**

Physical state Liquid  
Appearance Clear  
Color Colorless  
pH 1.2  
Remarks @ 20 °C

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

Physical state Liquid  
Appearance Clear  
Color Colorless  
pH 6.4  
Remarks @ 20 °C

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

Physical state Liquid  
Appearance Clear  
Color light yellow  
pH 7  
Remarks @ 20 °C

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

Physical state Liquid  
Appearance Clear  
Color Colorless

**Kit Component 57025: FastScan™ ELISA Kit #45057 Positive Control Type 1**

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

#### Hazardous polymerization

Hazardous polymerization does not occur.

#### Hazardous reactions

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
sodium fluoride	= 52 mg/kg (Rat)	= 175 mg/kg ( Rat )	-
trisodium tetraoxovanadate	= 330 mg/kg (rat)	-	-
polyethylene glycol	= 1800 mg/kg (Rat)	-	-
p-(1,1,3,3-tetramethylbutyl)phenylether			
alpha-toluenesulphonyl fluoride	200 (mg/kg) (mice)	-	-
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

## 45057 FastScan™ Phospho-Bad (Ser136) ELISA Kit

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<b>Kit Component</b> Inhalation	<b>27139: Bad Rabbit Capture mAb</b> May cause allergic respiratory reaction
<b>Kit Component</b> Inhalation	<b>23922: Phospho-Bad (Ser136) 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>27139: Bad Rabbit Capture mAb</b> May cause slight irritation
<b>Kit Component</b> Eye contact	<b>23922: Phospho-Bad (Ser136) 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>27139: Bad Rabbit Capture mAb</b> Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
<b>Kit Component</b> Skin contact	<b>23922: Phospho-Bad (Ser136) 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>	<b>7002: STOP Solution</b>

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## 45057 FastScan™ Phospho-Bad (Ser136) ELISA Kit

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Skin contact	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
<b>Kit Component</b> Skin contact	<b>57025: FastScan™ ELISA Kit #45057 Positive Control Type 1</b> Irritating to skin

### Ingestion

<b>Kit Component</b> Ingestion	<b>27139: Bad Rabbit Capture mAb</b> Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea
<b>Kit Component</b> Ingestion	<b>23922: Phospho-Bad (Ser136) 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

<b>Symptoms</b>	Contains kit components which may cause the following effects, refer to individual component SDSs for full information on 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.
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### **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 Skin corrosion/irritation	<b>9801: ELISA Wash Buffer (20X)</b> Causes serious eye irritation Causes skin irritation

### **Sensitization**

<b>Kit Component</b>	<b>27139: Bad Rabbit Capture mAb</b>
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## 45057 FastScan™ Phospho-Bad (Ser136) ELISA Kit

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Respiratory Sensitization  
Skin Sensitization

Respiratory Sensitizer  
May cause skin sensitization

**Kit Component**  
Respiratory Sensitization  
Skin Sensitization

**23922: Phospho-Bad (Ser136) Rabbit HRP-linked mAb**  
Respiratory Sensitizer  
May cause skin sensitization

**Kit Component**  
Skin Sensitization

**16076: FastScan™ ELISA Capture Antibody Diluent**  
As a precaution the product should be treated as a sensitizer

**Kit Component**  
Skin Sensitization

**28120: FastScan™ ELISA HRP Antibody Diluent**  
May cause skin sensitization

**Kit Component**  
Skin Sensitization

**7002: STOP Solution**  
May cause skin sensitization

**Kit Component**  
Skin Sensitization

**9801: ELISA Wash Buffer (20X)**  
Product is or contains a sensitizer. May cause an allergic skin reaction

**Kit Component**  
Skin Sensitization

**69905: FastScan™ ELISA Cell Extraction Buffer (5X)**  
As a precaution the product should be treated as a sensitizer

**Kit Component**  
Skin Sensitization

**25243: FastScan™ ELISA Cell Extraction Enhancer Solution (50X)**  
As a precaution the product should be treated as a sensitizer

**Kit Component**  
Skin Sensitization

**57025: FastScan™ ELISA Kit #45057 Positive Control Type 1**  
May cause skin sensitization

### Mutagenic effects

**Kit Component**  
Mutagenic effects

**7002: STOP Solution**  
Not mutagenic in AMES Test

### Carcinogenic effects

No information available

### Reproductive toxicity

No information available.

### Systemic Target Organ Toxicity (STOT)

**Kit Component**  
STOT - single exposure

**7002: STOP Solution**  
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

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## 45057 FastScan™ Phospho-Bad (Ser136) ELISA Kit

**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
sodium fluoride	EC50 850 mg/L (Desmodesmus subspicatus) 72 h EC50 272 mg/L (Pseudokirchneriella subcapitata) 96 h	LC50 530 mg/L (Lepomis macrochirus) 96 h LC50 180 mg/L (Pimephales promelas) 96 h LC50 38 - 68 mg/L (Oncorhynchus mykiss) 96 h LC50 830 mg/L (Lepomis macrochirus) 96 h	EC50 98 mg/L (Daphnia magna) 48 h EC50 338 mg/L (Daphnia magna) 48 h
trisodium tetraoxovanadate	-	LC50 16.5 mg/L (Oncorhynchus tshawytscha) 96 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

## 45057 FastScan™ Phospho-Bad (Ser136) ELISA Kit

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

### 12.3. Bioaccumulative potential

**Kit Component**                      **7002: STOP Solution**  
Bioaccumulation                      Not likely to bioaccumulate  
Bioconcentration factor (BCF)      11 (maleic acid)

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

**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**                      Empty containers should be taken to an approved waste handling site for recycling or disposal.

**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

**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  
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:** Expert judgment and weight of evidence determination.  
**Issuing Date:** 2018-07-16  
**Revision Date:** 2024-07-11

**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.**