

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

Issuing Date: 2018-01-19

Revision Date: 2024-05-22

Version: 3

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

1.1. Product identifier

Product No	7348
Product name	PathScan® Phospho-SMAD2 (Ser465/467) Sandwich ELISA Kit
Kit Component	58908: SMAD2 Mouse mAb Coated Microwells 13767: Phospho-SMAD2 (Ser465/467) Rabbit Detection mAb 13272: Anti-rabbit IgG, HRP-linked Antibody (ELISA Formulated) 13339: Detection Antibody Diluent 13515: HRP Diluent 7004: TMB Substrate 7002: STOP Solution 11083: ELISA Sample Diluent 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

Chemical name	Index No.	CAS No
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
trometamol (0 - 10%)	Not Listed	77-86-1
tetrasodium pyrophosphate, decahydrate (0 - 10%)	Not Listed	13472-36-1
sodium azide (0 - 10%)	011-004-00-7	26628-22-8
reaction mass of:	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.

Skin corrosion/irritation	Category 1 - (H314)
Serious eye damage/eye irritation	Category 1 - (H318)
Skin sensitization	Category 1 - (H317)
Chronic aquatic toxicity	Category 3 - (H412)

2.2. Label elements**Signal word**

Danger

Hazard statement(s)

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.

7348 PathScan® Phospho-SMAD2 (Ser465/467) Sandwich ELISA Kit

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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-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 ingredient: Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS

7348 PathScan® Phospho-SMAD2 (Ser465/467) Sandwich ELISA Kit

220-239-6) (Mixture of CMIT/MIT)

Kit Component 11083: ELISA Sample Diluent

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

Kit Component 9803: Cell Lysis Buffer (10X)

DANGER: Causes 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	618-344-0	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 2 (H411)	no data available
trometamol	77-86-1	1.79	201-064-4	-	no data available
tetrasodium pyrophosphate, decahydrate	13472-36-1	0.1-1	-	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	no data available

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

Kit Component 13339: Detection Antibody Diluent

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
trometamol	77-86-1	0.5	201-064-4	-	no data available
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.	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)	no data available

220-239-6] (3:1)				Skin Sens. 1A (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) (EUH071)	
trometamol	77-86-1	0.5	201-064-4	-	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

58908: SMAD2 Mouse mAb Coated Microwells
13767: Phospho-SMAD2 (Ser465/467) Rabbit Detection mAb
13272: Anti-rabbit 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).

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

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately if symptoms occur. If breathing is difficult, give oxygen.

Skin contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Immediate medical attention is required.

Eye contact Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Ingestion 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.

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. Corrosive. Significant esophageal or gastrointestinal tract irritation or burns may occur following ingestion. 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. 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. 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 Probable mucosal damage may contraindicate the use of gastric lavage.

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

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

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Take up mechanically, placing in appropriate containers for disposal. Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Clean contaminated surface thoroughly.

6.4. Reference to other sections

See Sections 8 & 13 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

Use as a laboratory reagent.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values					
Chemical name	European Union	United Kingdom	France	Spain	Germany
tetrasodium pyrophosphate, decahydrate		STEL 15 mg/m ³ TWA 5 mg/m ³	TWA 5 mg/m ³	TWA 5 mg/m ³	
sodium azide	TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ S*	STEL 0.3 mg/m ³ TWA 0.1 mg/m ³ Skin	TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ P*	TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ S*	TWA: 0.2 mg/m ³ Ceiling / Peak: 0.4 mg/m ³
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [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 ³ TWA: 0.2 mg/m ³
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
tetrasodium pyrophosphate, decahydrate					TWA 5 mg/m ³
sodium azide	TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ Pelle*	TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ Ceiling 0.29 mg/m ³ Ceiling 0.11 ppm C(A4) P*	Huid* STEL 0.3 mg/m ³ TWA 0.1 mg/m ³	TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ iho*	TWA 0.1 mg/m ³ H*
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
tetrasodium pyrophosphate, decahydrate	STEL 10 mg/m ³ TWA 5 mg/m ³	TWA 5 mg/m ³		TWA 5 mg/m ³ STEL 10 mg/m ³	TWA 5 mg/m ³
sodium azide	H* STEL 0.3 mg/m ³ TWA 0.1 mg/m ³	TWA 0.2 mg/m ³ STEL 0.4 mg/m ³	TWA 0.1 mg/m ³ STEL 0.3 mg/m ³	TWA 0.1 mg/m ³ STEL 0.1 mg/m ³	TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ Skin
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	TWA 0.05 mg/m ³ Sh/Sah**	SS-C** S+ TWA 0.2 mg/m ³ STEL 0.4 mg/m ³			

8.2. Exposure controls

Appropriate engineering controls

Showers, eyewash stations, and ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection

Tightly fitting safety goggles Face-shield

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

7004: TMB Substrate

Physical state Liquid
Appearance Clear
Color Light yellow
pH 3.3-3.8 (20 °C)

Kit Component 7002: STOP Solution

Physical state Liquid
Appearance Clear
Color Colorless
pH 1.2 (20 °C)

Kit Component 9801: ELISA Wash Buffer (20X)

Physical state Liquid
Appearance Clear
Color Colorless
pH 6.4 (20 °C)

Kit Component 11083: ELISA Sample Diluent

Physical state Liquid
Appearance Clear
Color Blue
pH 7.1 (20 °C)

Kit Component 9803: Cell Lysis Buffer (10X)

Physical state Liquid
Appearance Clear
Color Colorless
pH 7.5 (20 °C)

Kit Component 13767: Phospho-SMAD2 (Ser465/467) Rabbit Detection mAb

Physical state Solid
Appearance Lyophilized, Powder
Color Green

Kit Component 13339: Detection Antibody Diluent

Physical state Liquid
Appearance Clear
Color Green
pH 7.4 (20 °C)

Kit Component 13272: Anti-rabbit IgG, HRP-linked Antibody (ELISA Formulated)

Physical state Solid
Appearance Lyophilized, Powder
Color Red

Kit Component 13515: HRP Diluent

Physical state Liquid
Appearance Clear
Color Red
pH 7.4 (20 °C)

Kit Component 58908: SMAD2 Mouse mAb Coated Microwells

Physical state Solid
Appearance Microwell Plate

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization
Hazardous reactions

Hazardous polymerization does not occur.
None under normal processing

10.4. Conditions to avoid

Extremes of temperature and direct sunlight. 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

Incompatible with strong acids and bases, Incompatible with oxidizing agents.

10.6. Hazardous decomposition products

Thermal decomposition can lead to release of toxic/corrosive 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
trometamol	5900 mg/kg (Rat)	-	-
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

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	13767: Phospho-SMAD2 (Ser465/467) Rabbit Detection mAb May cause allergic respiratory reaction
Kit Component Inhalation	13272: Anti-rabbit IgG, HRP-linked Antibody (ELISA Formulated) May cause allergic respiratory reaction
Kit Component Inhalation	13515: HRP Diluent Avoid breathing vapors or mists May cause irritation of respiratory tract

Eye contact

Kit Component Eye contact	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
Kit Component Eye contact	13515: HRP Diluent Contact with eyes may cause irritation

Skin contact

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
Kit Component Skin contact	13767: Phospho-SMAD2 (Ser465/467) Rabbit Detection mAb Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
Kit Component Skin contact	13272: Anti-rabbit IgG, HRP-linked Antibody (ELISA Formulated) Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
Kit Component Skin contact	13515: HRP Diluent Repeated or prolonged skin contact may cause allergic reactions with susceptible persons

Ingestion

Kit Component Ingestion	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

Symptoms	Contains kit components which may cause the following effects, refer to individual
-----------------	--

component SDSs for full information on symptoms. Corrosive. Significant esophageal or gastrointestinal tract irritation or burns may occur following ingestion. 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. 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. 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

Kit Component	7002: STOP Solution
Serious eye damage/eye irritation	Risk of serious damage to eyes
Skin corrosion/irritation	Causes burns

Kit Component	9801: ELISA Wash Buffer (20X)
Serious eye damage/eye irritation	Causes serious eye irritation
Skin corrosion/irritation	Causes skin irritation

Kit Component	9803: Cell Lysis Buffer (10X)
Serious eye damage/eye irritation	Irritating to eyes

Sensitization

Kit Component	7002: STOP Solution
Skin Sensitization	May cause skin sensitization

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

Kit Component	13767: Phospho-SMAD2 (Ser465/467) Rabbit Detection mAb
Respiratory Sensitization	May cause allergy or asthma symptoms or breathing difficulties if inhaled
Skin Sensitization	May cause skin sensitization

Kit Component	13272: Anti-rabbit IgG, HRP-linked Antibody (ELISA Formulated)
Respiratory Sensitization	May cause allergy or asthma symptoms or breathing difficulties if inhaled
Skin Sensitization	May cause skin sensitization

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

Mutagenic effects

Kit Component	7002: STOP Solution
Mutagenic effects	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

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
trometamol	-	-	NOEC >100 mg/L (Selenastrum capricornutum) 96 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

7002: STOP Solution

Bioaccumulation 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 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	Not regulated

according to IMO instruments

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 (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/NDL	-
EINECS/ELINCS	-
ENCS	-
IECSC	-
KECL	-
PICCS	-
AICS	-

International inventories legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - 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

H300 - Fatal if swallowed
H301 - Toxic if swallowed
H302 - Harmful if swallowed
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
H331 - Toxic if inhaled
H335 - May cause respiratory irritation
H412 - Harmful to aquatic life with long lasting effects
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
EUH032 - Contact with acids liberates very toxic gas

Classification procedure: Expert judgment and weight of evidence determination.
Issuing Date: 2018-01-19
Revision Date: 2024-05-22

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.