

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 12003

Product name PathScan® Phospho-SMAD3 (Ser423/425) Sandwich

ELISA Kit

Kit Component 85326: SMAD2/3 Mouse mAb Coated Microwells

14226: Phospho-SMAD3 (Ser423/425) Rabbit Detection mAb 13272: Anti-rabbit IgG, HRP-linked Antibody (ELISA Formulated)

13339: Detection Antibody Diluent

13515: HRP Diluent

11083: ELISA Sample Diluent

7002: STOP Solution 7004: TMB Substrate

9801: ELISA Wash Buffer (20X) 9803: Cell Lysis Buffer (10X)

Hazardous Components

13515: HRP Diluent 7002: STOP Solution

9801: ELISA Wash Buffer (20X) 9803: Cell Lysis Buffer (10X)

Contains

Chemical name polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether (10 - 20%	Index No. Not Listed	CAS No 9002-93-1
maleic acid (0 - 10%)	607-095-00-3	110-16-7
trometamol (0 - 10%) tetrasodium pyrophosphate, decahydrate (0 - 10%)	Not Listed Not Listed	77-86-1 13472-36-1
sodium azide (0 - 10%)	011-004-00-7	26628-22-8
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [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	55965-84-9

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses For Research Use Only. Not for Use in Diagnostic Procedures.

1.3. Details of the supplier of the safety data sheet

12003 PathScan® Phospho-SMAD3 (Ser423/425) Sandwich 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

www.cellsignal.com Website 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)

112 **Europe**

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.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

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

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing.

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.

2.3. Other hazards

This kit contains one or more components considered a treated article that incorporates a biocidal product as a preservative with the following active ingredient: Mixture of 5-chloro-2-methyl-2H- isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS 220-239-6) (Mixture of CMIT/MIT).

Polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether (CAS no. 9002-93-1) is a suspected endocrine disruptor. Endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100(3) or Commission Regulation (EU) 2018/605(4).

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

SECTION 3. Composition/information on ingredients

Kit Component

7002: STOP Solution

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

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
maleic acid	110-16-7	3-7	203-742-5	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) STOT SE 3 (H335)	no data available

Kit Component

9801: ELISA Wash Buffer (20X)

WARNING: May cause an allergic skin reaction.

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
reaction mass of: 5-chloro-2-methyl-4-isothi azolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)		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 11083: ELISA Sample Diluent

Chemical name	CAS No	Weight-%	EC No	Classification	REACH
	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	J		(1272/2008)	Registration
				,	Number

sodium azide	26628-22-8	<0.1	247-852-1	Acute Tox. 2 (H300) Aquatic Acute 1 (H400)	no data available
				Aquatic Chronic 1	
				(H410)	
				(EUH032)	

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-tetramethylbut yl)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-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
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 85326: SMAD2/3 Mouse mAb Coated Microwells

14226: Phospho-SMAD3 (Ser423/425) Rabbit Detection mAb 13272: Anti-rabbit IqG, 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

Skin contact

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. 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

Other information

Use personal protection recommended in Section 8. 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 Methods for cleaning up Prevent further leakage or spillage if safe to do so.

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/m³ STEL 0.3 mg/m³ S*	STEL 0.3 mg/m³ TWA 0.1 mg/m³ Skin	TWA 0.1 mg/m³ STEL 0.3 mg/m³ P*	TWA 0.1 mg/m³ STEL 0.3 mg/m³ S*	TWA: 0.2 mg/m ³ Ceiling / Peak: 0.4 mg/m ³
reaction mass of:	-	_			Ceiling / Peak: 0.4

5-chloro-2-methyl-4-isothiaz olin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)					mg/m³ TWA: 0.2 mg/m³
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
tetrasodium pyrophosphate, decahydrate					TWA 5 mg/m ³
sodium azide	TWA 0.1 mg/m³ STEL 0.3 mg/m³ Pelle*	TWA 0.1 mg/m³ STEL 0.3 mg/m³ Ceiling 0.29 mg/m³ Ceiling 0.11 ppm C(A4) P*	Huid* STEL 0.3 mg/m³ TWA 0.1 mg/m³	TWA 0.1 mg/m³ STEL 0.3 mg/m³ iho*	TWA 0.1 mg/m³ H*
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
tetrasodium pyrophosphate, decahydrate	STEL 10 mg/m³ TWA 5 mg/m³	TWA 5 mg/m ³		TWA 5 mg/m ³ STEL 10 mg/m ³	TWA 5 mg/m³
		TWA 5 mg/m³ TWA 0.2 mg/m³ STEL 0.4 mg/m³	TWA 0.1 mg/m³ STEL 0.3 mg/m³	TWA 5 mg/m ³	TWA 5 mg/m³ TWA 0.1 mg/m³ STEL 0.3 mg/m³ Skin

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

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 14226: Phospho-SMAD3 (Ser423/425) 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 Solic

Appearance Lyophilized, Powder

Color Red

Kit Component 13515: HRP Diluent

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

Kit Component 85326: SMAD2/3 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 polymerization does not occur.

Hazardous reactions 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	= 1800 mg/kg (Rat)	-	-	
p-(1,1,3,3-tetramethylbutyl)phenylet				
her				
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:	= 53 mg/kg (Rat) = 481 mg/kg	= 200 mg/kg (Rabbit)	= 1.23 mg/L (Rat) 4 h = 0.11 mg/L	
5-chloro-2-methyl-4-isothiazolin-3-o	(Rat) 232 - 249 mg/kg (Rat) = 120		(Rat) 4 h	
ne [EC no. 247-500-7] and	mg/kg (Rat)			
2-methyl-2H -isothiazol-3-one [EC	, ,			
no. 220-239-6] (3:1)				

Information on likely routes of exposure

Inhalation

Kit Component 7002: STOP Solution

Inhalation Aerosol expected to be irritating based on components

Kit Component 9801: ELISA Wash Buffer (20X)

Inhalation Avoid breathing vapors or mists May cause irritation of respiratory tract

Kit Component 14226: Phospho-SMAD3 (Ser423/425) Rabbit Detection mAb

Inhalation May cause allergic respiratory reaction

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

Inhalation May cause allergic respiratory reaction

Kit Component 13515: HRP Diluent

Inhalation Avoid breathing vapors or mists May cause irritation of respiratory tract

Eye contact

Kit Component 7002: STOP Solution

Eye contact May cause irreversible damage to eyes

Kit Component 9801: ELISA Wash Buffer (20X)

Eye contact Expected to be an irritant based on components

Kit Component 9803: Cell Lysis Buffer (10X)

Eye contact Expected to be an irritant based on components

Kit Component 13515: HRP Diluent

Eye contact Contact with eyes may cause irritation

Skin contact

Kit Component 7002: STOP Solution

Skin contact Corrosive to skin Prolonged contact with skin is harmful

Kit Component 9801: ELISA Wash Buffer (20X)

Skin contact Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Expected to be an irritant based on components

Kit Component 14226: Phospho-SMAD3 (Ser423/425) Rabbit Detection mAb

Skin contact Repeated or prolonged skin contact may cause allergic reactions with susceptible persons

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

Skin contact Repeated or prolonged skin contact may cause allergic reactions with susceptible persons

Kit Component 13515: HRP Diluent

Skin contact Repeated or prolonged skin contact may cause allergic reactions with susceptible persons

Ingestion

Kit Component 7002: STOP Solution

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

Kit Component 9801: ELISA Wash Buffer (20X)

Ingestion 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

9803: Cell Lysis Buffer (10X) Kit Component

Serious eye damage/eye irritation Irritating to eyes

Sensitization

7002: STOP Solution Kit Component 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 14226: Phospho-SMAD3 (Ser423/425) Rabbit Detection mAb

May cause allergy or asthma symptoms or breathing difficulties if inhaled Respiratory Sensitization

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

7002: STOP Solution Kit Component

Mutagenic effects Not mutagenic in AMES Test

No information available Carcinogenic effects

Reproductive toxicity No information available.

Systemic Target Organ Toxicity

(STOT)

Kit Component 7002: STOP Solution STOT - single exposure Respiratory system

No information available. **Aspiration Hazard**

11.2. Information on other hazards

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Product Information

Kit Component 7002: STOP SolutionEcotoxicity

Toxic to aquatic life

Kit Component 9801: ELISA Wash Buffer (20X)

Ecotoxicity 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)phenylet her	-	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		LC100 1 mg/L (Orconectes rusticus) 96 h
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-o ne [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	, ,	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 ComponentPersistence and degradability

7002: STOP Solution
Product is biodegradable

Kit Component 9801: ELISA Wash Buffer (20X)

Persistence and degradability Not readily biodegradable

12.3. Bioaccumulative potential

Kit ComponentBioaccumulation

7002: STOP Solution
Not likely to bioaccumulate

Kit ComponentBioaccumulation

9801: ELISA Wash Buffer (20X)
Not likely to bioaccumulate

Chemical name	Octanol-Water Partition Coefficient	
maleic acid	0.32	

12.4. Mobility in soil

Kit Component 7002: STOP Solution

Will likely be mobile in the environment due to its water solubility Mobility

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	Endocrine disrupting properties,	-	-
p-(1,1,3,3-tetramethylbutyl)phenylet	Article 57f - environment		
her			

12.7. Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused

products

Contaminated packaging

Dispose of in accordance with local regulations.

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

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 Ш 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 Ш 14.4 Packing group 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)

14.3Transport hazard class(es)814.4Packing groupIII14.5Environmental hazardsNone14.6Special precautions for userNoneExcepted QuantityE1

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	Reason for inclusion Endocrine	-
p-(1,1,3,3-tetramethylbutyl)phenylether (10 -	disrupting properties, Article 57f -	
20%)	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

12003 PathScan® Phospho-SMAD3 (Ser423/425) Sandwich ELISA Kit

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.

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.