

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

Issuing Date: 2018-07-16

Revision Date: 2024-07-11

Version: 4

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

1.1. Product identifier

Product No	86932
Product name	FastScan™ Phospho-SMAD2 (Ser465/467) ELISA Kit
Kit Component	60349: SMAD2 Mouse Capture mAb 75533: Phospho-SMAD2 (Ser465/467) 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) 48414: FastScan™ ELISA Kit #86932 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

Chemical name	Index No.	CAS No
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

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.

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).

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

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

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

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
sodium dodecyl sulphate	151-21-3	1-3	205-788-1	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Acute Tox. 4 (H302) Acute Tox. 3 (H311)	no data available
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	55965-84-9	0.001-0.005	-	Acute Tox. 3 (H301) Acute Tox. 2 (H310) Acute Tox. 3 (H311) Acute Tox. 2 (H330) Skin Corr. 1C (H314) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Skin Sens. 1A (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) (EUH071)	no data available

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

Kit Component**48414: FastScan™ ELISA Kit #86932 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-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-<0.06	-	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	60349: SMAD2 Mouse Capture mAb 75533: Phospho-SMAD2 (Ser465/467) Rabbit HRP-linked mAb 7004: TMB Substrate
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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

General advice	Call a doctor immediately if allergic signs, particularly in the respiratory tract, are observed.
Inhalation	Immediate medical attention is required. May cause allergic respiratory reaction. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately if symptoms occur. Administer oxygen if breathing is difficult. If not breathing, give artificial respiration.
Skin contact	Immediate medical attention is required. Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. May cause an allergic skin reaction.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Consult a physician.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without medical advice. If symptoms persist, call a physician. Never give anything by mouth to an unconscious person.

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

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

Notes to physician	May cause sensitization by inhalation and skin contact. Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes. Product is or contains a sensitizer.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Avoid contact with skin, eyes and clothing. Use personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Avoid dust formation.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

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

6.4. Reference to other sections

See Sections 8 & 13 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

Use as a laboratory reagent.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values					
Chemical name	European Union	United Kingdom	France	Spain	Germany
sodium fluoride	TWA 2.5 mg/m ³	STEL 7.5 mg/m ³ TWA 2.5 mg/m ³	TWA 2 mg/m ³ TWA 2.5 mg/m ³	TWA 2.5 mg/m ³	TWA: 1 mg/m ³ Skin
reaction mass of: 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)					Ceiling / Peak: 0.4 mg/m ³ TWA: 0.2 mg/m ³
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark

sodium fluoride	TWA 2.5 mg/m ³	TWA 2.5 mg/m ³ C(A4)		TWA 2.5 mg/m ³	TWA 2.5 mg/m ³
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
sodium fluoride			TWA 2 mg/m ³	TWA 0.5 mg/m ³ STEL 1.5 mg/m ³	TWA 2.5 mg/m ³ STEL 7.5 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)	TWA 0.05 mg/m ³ Sh/Sah**	SS-C** S+ TWA 0.2 mg/m ³ STEL 0.4 mg/m ³			

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

60349: SMAD2 Mouse Capture mAb

Solid

Lyophilized, Powder

Green

Kit Component

Physical state

Appearance

Color

75533: Phospho-SMAD2 (Ser465/467) Rabbit HRP-linked mAb

Solid

Lyophilized, Powder

Red

Kit Component

Physical state

Appearance

Color

pH

Remarks

16076: FastScan™ ELISA Capture Antibody Diluent

Liquid

Clear

Green

7.4

@ 20 °C

Kit Component

Physical state
Color
pH
Remarks
Boiling point/range (°C) VALUE
Boiling point/range (°F) VALUE
Solubility

28120: FastScan™ ELISA HRP Antibody Diluent

Liquid
Brown
6.8-7.2
@ 20 °C
100
212
Soluble in water

Kit Component

Physical state
Appearance
Color
pH
Remarks

7004: TMB Substrate

Liquid
Clear
Light yellow
3.3-3.8
@ 20 °C

Kit Component

Physical state
Appearance
Color
pH
Remarks

7002: STOP Solution

Liquid
Clear
Colorless
1.2
@ 20 °C

Kit Component

Physical state
Appearance
Color
pH
Remarks

9801: ELISA Wash Buffer (20X)

Liquid
Clear
Colorless
6.4
@ 20 °C

Kit Component

Physical state
Appearance
Color
pH
Remarks

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

Liquid
Clear
light yellow
7
@ 20 °C

Kit Component

Physical state
Appearance
Color

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

Liquid
Clear
Colorless

Kit Component

Physical state
Appearance
Color

48414: FastScan™ ELISA Kit #86932 Positive Control Type 1

Solid
Lyophilized, Powder
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 reactions**

Hazardous polymerization does not occur.
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 (CO_x)

Nitrogen oxides (NO_x)

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

Kit Component
Inhalation

60349: SMAD2 Mouse Capture mAb
May cause allergic respiratory reaction

Kit Component
Inhalation

75533: Phospho-SMAD2 (Ser465/467) Rabbit HRP-linked mAb
May cause allergic respiratory reaction

Kit Component
Inhalation

28120: FastScan™ ELISA HRP Antibody Diluent
May cause irritation of respiratory tract

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

Kit Component

Inhalation

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

May cause irritation of respiratory tract

Eye contact**Kit Component**

Eye contact

60349: SMAD2 Mouse Capture mAb

May cause slight irritation

Kit Component

Eye contact

75533: Phospho-SMAD2 (Ser465/467) Rabbit HRP-linked mAb

May cause slight irritation

Kit Component

Eye contact

28120: FastScan™ ELISA HRP Antibody Diluent

May cause temporary eye irritation

Kit Component

Eye contact

7002: STOP Solution

May cause irreversible damage to eyes

Kit Component

Eye contact

9801: ELISA Wash Buffer (20X)

Expected to be an irritant based on components

Kit Component

Eye contact

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

May cause irritation

Kit Component

Eye contact

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

May cause irritation

Skin contact**Kit Component**

Skin contact

60349: SMAD2 Mouse Capture mAb

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

Kit Component

Skin contact

75533: Phospho-SMAD2 (Ser465/467) Rabbit HRP-linked mAb

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

Kit Component

Skin contact

16076: FastScan™ ELISA Capture Antibody Diluent

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

Kit Component

Skin contact

28120: FastScan™ ELISA HRP Antibody Diluent

May cause irritation

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

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

May cause sensitization by skin contact

Kit Component
Skin contact

48414: FastScan™ ELISA Kit #86932 Positive Control Type 1
Irritating to skin

Ingestion

Kit Component
Ingestion

60349: SMAD2 Mouse Capture mAb
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea

Kit Component
Ingestion

75533: Phospho-SMAD2 (Ser465/467) Rabbit HRP-linked mAb
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea

Kit Component
Ingestion

28120: FastScan™ ELISA HRP Antibody Diluent
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea

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

Kit Component
Ingestion

69905: FastScan™ ELISA Cell Extraction Buffer (5X)
Ingestion may cause irritation to mucous membranes

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

Skin and Eye Corrosion/Irritation

Kit Component
Serious eye damage/eye irritation
Skin corrosion/irritation

7002: STOP Solution
Risk of serious damage to eyes
Causes burns

Kit Component
Serious eye damage/eye irritation
Skin corrosion/irritation

9801: ELISA Wash Buffer (20X)
Causes serious eye irritation
Causes skin irritation

Sensitization

Kit Component
Respiratory Sensitization
Skin Sensitization

60349: SMAD2 Mouse Capture mAb
Respiratory Sensitizer
May cause skin sensitization

Kit Component
Respiratory Sensitization
Skin Sensitization

75533: Phospho-SMAD2 (Ser465/467) 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	48414: FastScan™ ELISA Kit #86932 Positive Control Type 1 May cause skin sensitization

Mutagenic effects

Kit Component Mutagenic effects	7002: STOP Solution Not mutagenic in AMES Test
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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
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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	9801: ELISA Wash Buffer (20X) Harmful to aquatic life with long lasting effects
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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)	LC50 8 - 12.5 mg/L (Pimephales)	EC50 21.2 mg/L (Daphnia magna)

	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	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	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

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
 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.