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

Issuing Date: 2019-11-19 **Revision Date:** 2024-06-06 **Version:** 4

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

1.1. Product identifier

Product No 25587

Product name FastScan™ Total SMAD2 ELISA Kit

Kit Component

53257: FastScan™ ELISA Microwell Strip Plate, 96 Well
83844: SMAD2 Mouse Capture mAb
75046: SMAD2 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)
36916: FastScan™ ELISA Kit #25587 Positive Control Type 2

Hazardous Components
9801: ELISA Wash Buffer (20X)
7002: STOP Solution
16076: FastScan™ ELISA Capture Antibody Diluent
28120: FastScan™ ELISA HRP Antibody Diluent
69905: FastScan™ ELISA Cell Extraction Buffer (5X)
25243: FastScan™ ELISA Cell Extraction Enhancer Solution (50X)

Contains

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
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether (0 - 10%)	Not Listed	9002-93-1
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

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

WARNING: May cause an allergic skin reaction.

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)	55965-84-9	0.0025-0.0125	-	Acute Tox. 3 (H301) Acute Tox. 2 (H310) Acute Tox. 3 (H311) Acute Tox. 2 (H330) Skin Corr. 1C (H314) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Skin Sens. 1A (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) (EUH071)	no data available

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

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

WARNING: May cause an allergic skin reaction.

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no.	55965-84-9	0.0015	-	Acute Tox. 3 (H301) Acute Tox. 2 (H310) Acute Tox. 3 (H311) Acute Tox. 2 (H330) Skin Corr. 1C (H314) Skin Corr. 1B (H314) Eye Dam. 1 (H318)	no data available

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

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.	55965-84-9	0.0025-0.0125	-	Acute Tox. 3 (H301) Acute Tox. 2 (H310) Acute Tox. 3 (H311) Acute Tox. 2 (H330)	no data available

247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)				Skin Corr. 1C (H314) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Skin Sens. 1A (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) (EUH071)	

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
83844: SMAD2 Mouse Capture mAb
75046: SMAD2 Rabbit HRP-linked mAb
7004: TMB Substrate
36916: FastScan™ ELISA Kit #25587 Positive Control Type 2
53257: FastScan™ ELISA Microwell Strip Plate, 96 Well

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
Inhalation

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

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

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

Notes to physician	May cause sensitization by inhalation and skin contact. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Avoid dust formation.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so. Prevent dust cloud.
Methods for cleaning up	Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. Prevent product from entering drains.

6.4. Reference to other sections

See Sections 8 & 13 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

Use as a laboratory reagent.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values					
Chemical name	**European Union**	**United Kingdom**	**France**	**Spain**	**Germany**
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)					Ceiling / Peak: 0.4 mg/m³ TWA: 0.2 mg/m³
Chemical name	**Austria**	**Switzerland**	**Poland**	**Norway**	**Ireland**
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	TWA 0.05 mg/m³ Sh/Sah**	SS-C** S+ TWA 0.2 mg/m³ STEL 0.4 mg/m³			

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	**83844: SMAD2 Mouse Capture mAb**
Physical state	Solid
Appearance	Lyophilized, Powder
Color	Green
Kit Component	**75046: SMAD2 Rabbit HRP-linked mAb**
Physical state	Solid
Appearance	Lyophilized, Powder
Color	Red
Kit Component	**16076: FastScan™ ELISA Capture Antibody Diluent**
Physical state	Liquid
Appearance	Clear
Color	Green
pH	7.4
Remarks	@ 20 °C
Kit Component	**28120: FastScan™ ELISA HRP Antibody Diluent**
Physical state	Liquid
Color	Brown
pH	6.8-7.2
Remarks	@ 20 °C
Boiling point/range (°C) VALUE	100
Boiling point/range (°F) VALUE	212
Solubility	Soluble in water
Kit Component	**7004: TMB Substrate**
Physical state	Liquid
Appearance	Clear
Color	Light yellow
pH	3.3-3.8
Remarks	@ 20 °C
Kit Component	**7002: STOP Solution**
Physical state	Liquid
Appearance	Clear
Color	Colorless
pH	1.2
Remarks	@ 20 °C
Kit Component	**9801: ELISA Wash Buffer (20X)**
Physical state	Liquid
Appearance	Clear
Color	Colorless
pH	6.4
Remarks	@ 20 °C
Kit Component	**69905: FastScan™ ELISA Cell Extraction Buffer (5X)**
Physical state	Liquid
Appearance	Clear
Color	light yellow
pH	7

Remarks	@ 20 °C
Kit Component	**25243: FastScan™ ELISA Cell Extraction Enhancer Solution (50X)**
Physical state	Liquid
Appearance	Clear
Color	Colorless
Kit Component	**36916: FastScan™ ELISA Kit #25587 Positive Control Type 2**
Physical state	Solid
Appearance	Lyophilized, Powder
Color	White
Kit Component	**53257: FastScan™ ELISA Microwell Strip Plate, 96 Well**
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

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

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

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

Product Information
This material should only be handled by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals. It should be borne in mind that the toxicological and physiological properties of this compound is not well defined.

Component Information

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
maleic acid	708 mg/kg (Rat)	1,560 mg/kg (Rabbit)	> 0.72 mg/L (Rat) 1h
sodium dodecyl sulphate	= 1288 mg/kg (Rat)	= 200 mg/kg (Rabbit)	> 3900 mg/m³ (Rat) 1 h
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether	= 1800 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 **83844: SMAD2 Mouse Capture mAb**
Inhalation May cause allergic respiratory reaction

Kit Component **75046: SMAD2 Rabbit HRP-linked mAb**
Inhalation May cause allergic respiratory reaction

Kit Component **28120: FastScan™ ELISA HRP Antibody Diluent**
Inhalation May cause irritation of respiratory tract

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 **69905: FastScan™ ELISA Cell Extraction Buffer (5X)**
Inhalation May cause irritation of respiratory tract

Eye contact

Kit Component **83844: SMAD2 Mouse Capture mAb**
Eye contact May cause slight irritation

Kit Component **75046: SMAD2 Rabbit HRP-linked mAb**
Eye contact May cause slight irritation

Kit Component **28120: FastScan™ ELISA HRP Antibody Diluent**
Eye contact May cause temporary eye irritation

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 **69905: FastScan™ ELISA Cell Extraction Buffer (5X)**
Eye contact May cause irritation

Kit Component **25243: FastScan™ ELISA Cell Extraction Enhancer Solution (50X)**
Eye contact May cause irritation

Skin contact

Kit Component	**83844: SMAD2 Mouse Capture mAb**
Skin contact	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
Kit Component	**75046: SMAD2 Rabbit HRP-linked mAb**
Skin contact	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
Kit Component	**16076: FastScan™ ELISA Capture Antibody Diluent**
Skin contact	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
Kit Component	**28120: FastScan™ ELISA HRP Antibody Diluent**
Skin contact	May cause irritation
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	**25243: FastScan™ ELISA Cell Extraction Enhancer Solution (50X)**
Skin contact	May cause sensitization by skin contact

Ingestion

Kit Component	**83844: SMAD2 Mouse Capture mAb**
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea
Kit Component	**75046: SMAD2 Rabbit HRP-linked mAb**
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea
Kit Component	**28120: FastScan™ ELISA HRP Antibody Diluent**
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea
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
Kit Component	**69905: FastScan™ ELISA Cell Extraction Buffer (5X)**
Ingestion	Ingestion may cause irritation to mucous membranes

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

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

Skin and Eye Corrosion/Irritation

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

Sensitization

Kit Component	**83844: SMAD2 Mouse Capture mAb**
Respiratory Sensitization	Respiratory Sensitizer
Skin Sensitization	May cause skin sensitization

Kit Component	**75046: SMAD2 Rabbit HRP-linked mAb**
Respiratory Sensitization	Respiratory Sensitizer
Skin Sensitization	May cause skin sensitization

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

Kit Component	**28120: FastScan™ ELISA HRP Antibody Diluent**
Skin Sensitization	May cause skin 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	**69905: FastScan™ ELISA Cell Extraction Buffer (5X)**
Skin Sensitization	As a precaution the product should be treated as a sensitizer

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

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	**7002: STOP Solution**
STOT - single exposure	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 **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
maleic acid	-	LC50 5 mg/L (Pimephales promelas) 96 h	EC50 250 - 400 mg/L (Daphnia magna) 48 h
sodium dodecyl sulphate	EC50 53 mg/L (Desmodesmus subspicatus) 72 h EC50 30 - 100 mg/L (Desmodesmus subspicatus) 96 h EC50 42 mg/L (Desmodesmus subspicatus) 96 h EC50 3.59 - 15.6 mg/L (Pseudokirchneriella subcapitata) 96 h EC50 117 mg/L (Pseudokirchneriella subcapitata) 96 h	LC50 8 - 12.5 mg/L (Pimephales promelas) 96 h LC50 4.1 mg/L (Leuciscus idus) 48 h LC50 22.1 - 22.8 mg/L (Pimephales promelas) 96 h LC50 4.3 - 8.5 mg/L (Oncorhynchus mykiss) 96 h LC50 4.62 mg/L (Oncorhynchus mykiss) 96 h LC50 4.2 mg/L (Oncorhynchus mykiss) 96 h LC50 7.97 mg/L (Brachydanio rerio) 96 h LC50 9.9 - 20.1 mg/L (Brachydanio rerio) 96 h LC50 4.06 - 5.75 mg/L (Lepomis macrochirus) 96 h LC50 4.2 - 4.8 mg/L (Lepomis macrochirus) 96 h LC50 4.5 mg/L (Lepomis macrochirus) 96 h LC50 5.8 - 7.5 mg/L (Pimephales promelas) 96 h LC50 10.2 - 22.5 mg/L (Pimephales promelas) 96 h LC50 6.2 - 9.6 mg/L (Pimephales promelas) 96 h LC50 13.5 - 18.3 mg/L (Poecilia reticulata) 96 h LC50 10.8 - 16.6 mg/L (Poecilia reticulata) 96 h LC50 1.31 mg/L (Cyprinus carpio) 96 h LC50 15 - 18.9 mg/L (Pimephales promelas) 96 h	EC50 21.2 mg/L (Daphnia magna) 24 h EC50 1.8 mg/L (Daphnia magna) 48 h
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether	-	LC50 8.9 mg/l (Pimephales promelas) 96 h	EC50 26 mg/l (Daphnia) 48 h
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)	EC50 0.11 - 0.16 mg/L (Pseudokirchneriella subcapitata) 72 h EC50 0.31 mg/L (Anabaena flos-aquae) 120 h EC50 0.03 - 0.13 mg/L (Pseudokirchneriella subcapitata) 96 h	LC50 1.6 mg/L (Oncorhynchus mykiss) 96 h	EC50 4.71 mg/L (Daphnia magna) 48 h EC50 0.71 - 0.99 mg/L (Daphnia magna) 48 h EC50 0.12 - 0.3 mg/L (Daphnia magna) 48 h

12.2. Persistence and degradability

Kit Component **16076: FastScan™ ELISA Capture Antibody Diluent**
Persistence and degradability Not readily biodegradable

Kit Component **7002: STOP Solution**
Persistence and degradability Product is biodegradable

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

12.3. Bioaccumulative potential

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

Kit Component	**9801: ELISA Wash Buffer (20X)**
Bioaccumulation	Not likely to bioaccumulate

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

12.4. Mobility in soil

Kit Component	**7002: STOP Solution**
Mobility	Will likely be mobile in the environment due to its water solubility

Kit Component	**9801: ELISA Wash Buffer (20X)**
Mobility	Will likely be mobile in the environment due to its water solubility

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Endocrine disrupting properties

Chemical name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether	Endocrine disrupting properties, Article 57f - environment	-	-

12.7. Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.
Other information	Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

This material is subject to regulation as a hazardous material for shipping:

IMDG/IMO

14.1 UN number	UN3265
14.2 UN proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (maleic acid)
14.3 Transport hazard class(es)	8
14.4 Packing group	III
14.5 Environmental hazards	None
14.6 Special precautions for user	None
14.7 Maritime transport in bulk according to IMO instruments	Not regulated

ADR/RID

14.1 UN number	UN3265
14.2 UN proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (maleic acid)
14.3 Transport hazard class(es)	8
14.4 Packing group	III
14.5 Environmental hazards	None
14.6 Special precautions for user	None

IATA

14.1 UN number	UN3265
14.2 UN proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (maleic acid)
14.3 Transport hazard class(es)	8
14.4 Packing group	III
14.5 Environmental hazards	None
14.6 Special precautions for user	None
Excepted Quantity	E1

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

Chemical name	Candidate List of Substances of Very High Concern for Authorization Information	REACH Annex XVII
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether (0 - 10%)	Reason for inclusion Endocrine disrupting properties, Article 57f - environment	-

SEVESO Directive Information

This product does not contain substances identified in the SEVESO Directive.

International inventories

TSCA 8(b)	-
DSL/NDSL	-
EINECS/ELINCS	-
ENCS	-
IECSC	-
KECL	-
PICCS	-

AICS -

International inventories legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out

SECTION 16: Other information

Full text of H-Statements referred to under Sections 2 and 3

H301 - Toxic if swallowed
H302 - Harmful if swallowed
H310 - Fatal in contact with skin
H311 - Toxic in contact with skin
H314 - Causes severe skin burns and eye damage
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H319 - Causes serious eye irritation
H330 - Fatal if inhaled
H335 - May cause respiratory irritation
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H411 - Toxic to aquatic life with long lasting effects
EUH071 - Corrosive to the respiratory tract

Classification procedure: Expert judgment and weight of evidence determination.
Issuing Date: 2019-11-19
Revision Date: 2024-06-06

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.