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

Issuing Date: 2018-01-19 **Version:** 1

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

1.1. Product identifier

Product No 7105
Product name PathScan® Apoptosis Multi-Target Sandwich ELISA Kit
Kit Component
6 Green Detection Antibodies
***6 Red HRP-Linked Antibodies**
TMB Substrate
STOP Solution
ELISA Wash Buffer (20X)
ELISA Sample Diluent
Cell Lysis Buffer (10X)

***Note: Some PathScan® ELISA Kits may include HRP-Linked Streptavidin in place of HRP-Linked Antibody.**

Reach registration number This substance/mixture contains only ingredients which have been registered, or are exempt from registration, according to Regulation (EC) No. 1907/2006.

Contains

Chemical Name	Index No.	CAS No
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether (10 - 20%)	Not Listed	9002-93-1
trometamol (0 - 10%)	Not Listed	77-86-1
maleic acid (0 - 10%)	607-095-00-3	110-16-7
sodium azide (0 - 10%)	011-004-00-7	26628-22-8
tetrasodium pyrophosphate, decahydrate (0 - 10%)	Not Listed	13472-36-1
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

1.3. Details of the supplier of the safety data sheet

Importer (Applicable in EU only)
Cell Signaling Technology Europe B.V.
Schuttersveld 2
2316 ZA Leiden
The Netherlands
TEL: +31 (0)71 7200 200
FAX: +31 (0)71 891 0098

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

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
P362 - Take off contaminated clothing and wash before reuse
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
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
P310 - Immediately call a POISON CENTER or doctor/physician
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

2.3. Other hazards

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 Name Phospho-p53 (Ser15) Detection Antibody (orange cap)

Chemical Name	CAS No	Weight %	EC No	Classification (1272/2008)	REACH Registration Number
trometamol	77-86-1	0.5	201-064-4	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	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 Name p53 Detection Antibody (yellow cap)

Chemical Name	CAS No	Weight %	EC No	Classification (1272/2008)	REACH Registration Number
trometamol	77-86-1	0.5	201-064-4	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	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 Name Biotinylated Caspase-3 Rabbit Detection Antibody (purple cap)

Chemical Name	CAS No	Weight %	EC No	Classification (1272/2008)	REACH Registration Number
trometamol	77-86-1	0.5	201-064-4	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	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 Name PARP Biotinylated Detection Antibody (green cap)

Chemical Name	CAS No	Weight %	EC No	Classification (1272/2008)	REACH Registration Number
trometamol	77-86-1	0.5	201-064-4	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	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 Name Phospho-Bad (Ser112) Detection Antibody (pink cap)

Chemical Name	CAS No	Weight %	EC No	Classification (1272/2008)	REACH Registration Number
trometamol	77-86-1	0.5	201-064-4	Skin Irrit. 2 (H315)	no data available

				Eye Irrit. 2 (H319) STOT SE 3 (H335)	
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 Name Bad Detection Antibody (grey cap)

Chemical Name	CAS No	Weight %	EC No	Classification (1272/2008)	REACH Registration Number
trometamol	77-86-1	0.5	201-064-4	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	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 Name Anti-Mouse IgG HRP-Linked Antibody (orange cap)

Chemical Name	CAS No	Weight %	EC No	Classification (1272/2008)	REACH Registration Number
trometamol	77-86-1	0.5	201-064-4	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	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	0.005-0.025	-	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	no data available

Kit Component Name Anti-Mouse IgG HRP-Linked Antibody (yellow cap)

Chemical Name	CAS No	Weight %	EC No	Classification (1272/2008)	REACH Registration Number
trometamol	77-86-1	0.5	201-064-4	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	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	0.005-0.025	-	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	no data available

Kit Component Name HRP-linked Streptavidin (purple cap)

Chemical Name	CAS No	Weight %	EC No	Classification (1272/2008)	REACH Registration Number
trometamol	77-86-1	0.5	201-064-4	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	no data available
reaction mass of: 5-chloro-2-methyl-4-isothi	55965-84-9	0.005-0.025	-	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331)	no data available

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

Kit Component Name HRP- Linked Streptavidin (green cap)

Chemical Name	CAS No	Weight %	EC No	Classification (1272/2008)	REACH Registration Number
trometamol	77-86-1	0.5	201-064-4	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	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	0.005-0.025	-	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	no data available

Kit Component Name Anti-Mouse IgG HRP-Linked Antibody (pink cap)

Chemical Name	CAS No	Weight %	EC No	Classification (1272/2008)	REACH Registration Number
trometamol	77-86-1	0.5	201-064-4	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	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	0.005-0.025	-	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	no data available

Kit Component Name Anti-Mouse IgG HRP-Linked Antibody (grey cap)

Chemical Name	CAS No	Weight %	EC No	Classification (1272/2008)	REACH Registration Number
trometamol	77-86-1	0.5	201-064-4	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	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	0.005-0.025	-	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	no data available

Kit Component Name STOP Solution

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)	no data available

				STOT SE 3 (H335)	

Kit Component Name ELISA Wash Buffer (20X)

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. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	no data available

Kit Component Name ELISA Sample Diluent

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

Kit Component Name Cell Lysis Buffer (10X)

Chemical Name	CAS No	Weight %	EC No	Classification (1272/2008)	REACH Registration Number
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether	9002-93-1	10	618-344-0	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 2 (H411)	no data available
trometamol	77-86-1	1.79	201-064-4	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	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

Kit Component Name TMB Substrate

This product does not contain substances at concentrations requiring disclosure under (EC) No. 1907/2006 (REACH).

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

SECTION 4: First aid measures

4.1. Description of first aid measures

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

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

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

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

Ingestion Get medical attention. Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

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

Contains kit components which may cause the following effects, refer to individual component SDSs for full information on symptoms:
Corrosive. Significant esophageal or gastrointestinal tract irritation or burns may occur following ingestion. Liquid, aerosols and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes. Respiratory tract irritation, if severe, can progress to pulmonary edema which may be delayed in onset up to 24 to 72 hours after exposure in some cases. Contains an animal derived biological. May produce an allergic reaction in susceptible individuals. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

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

Notes to physician Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes.

5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

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. Remove and wash contaminated clothing before re-use. Contaminated work clothing should not be allowed out of the workplace. Provide regular cleaning of equipment, work area and clothing. Keep away from food, drink and animal feeding stuffs. Wear suitable gloves and eye/face protection.

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

Chemical Name	European Union	United Kingdom	France	Spain	Germany
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/m³ Ceiling / Peak: 0.4 mg/m³
tetrasodium pyrophosphate, decahydrate		STEL 15 mg/m³ TWA 5 mg/m³	TWA 5 mg/m³	TWA 5 mg/m³	
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	**Italy**	**Portugal**	**Netherlands**	**Finland**	**Denmark**
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*
tetrasodium pyrophosphate, decahydrate					TWA 5 mg/m³
Chemical Name	**Austria**	**Switzerland**	**Poland**	**Norway**	**Ireland**
sodium azide	H* STEL 0.3 mg/m³ TWA 0.1 mg/m³	TWA 0.2 mg/m³ STEL 0.4 mg/m³	TWA 0.1 mg/m³ STEL 0.3 mg/m³	TWA 0.1 mg/m³ STEL 0.1 mg/m³	TWA 0.1 mg/m³ STEL 0.3 mg/m³ Skin
tetrasodium pyrophosphate, decahydrate	STEL 10 mg/m³ TWA 5 mg/m³	TWA 5 mg/m³		TWA 5 mg/m³ STEL 10 mg/m³	TWA 5 mg/m³
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)	H* TWA 0.05 mg/m³ Sh/Sah**	SS-C** S+ TWA 0.2 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	Tightly fitting safety goggles Face-shield
Skin protection	
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	**6 Green Detection Antibodies**
Physical state	Liquid
Appearance	Clear
Color	Green
pH VALUE	7.4
Remarks	@ 20 °C

Kit Component	***6 Red HRP-Linked Antibodies**
Physical state	Liquid
Appearance	Clear
Color	Red
pH VALUE	7.4
Remarks	@ 20 °C

Kit Component	**TMB Substrate**
Physical state	Liquid
Appearance	Clear
Color	Light yellow
pH VALUE	3.3-3.8
Remarks	@ 20 °C

Kit Component	**STOP Solution**
Physical state	Liquid
Appearance	Clear
Color	Colorless
pH VALUE	1.2
Remarks	@ 20 °C

Kit Component	**ELISA Wash Buffer (20X)**
Physical state	Liquid
Appearance	Clear
Color	Colorless
pH VALUE	6.4
Remarks	@ 20 °C

Kit Component	**ELISA Sample Diluent**
Physical state	Liquid
Appearance	Clear
Color	Blue
pH VALUE	7.1
Remarks	@ 20 °C

Kit Component	**Cell Lysis Buffer (10X)**
Physical state	Liquid
Color	Colorless
pH VALUE	7.5
Remarks	@ 20 °C

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 toxicological effects

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

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether	= 1800 mg/kg (Rat)	-	-
trometamol	5900 mg/kg (Rat)	-	-
maleic acid	708 mg/kg (Rat)	1,560 mg/kg (Rabbit)	> 0.72 mg/L (Rat) 1h
sodium azide	= 27 mg/kg (Rat)	= 20 mg/kg (Rabbit) = 50 mg/kg (Rat)	-
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)	= 53 mg/kg (Rat) = 481 mg/kg (Rat)	-	= 1.23 mg/L (Rat) 4 h

Information on likely routes of exposure

Inhalation

Kit Component STOP Solution
Inhalation Aerosol expected to be irritating based on components

Kit Component	ELISA Wash Buffer (20X)
Inhalation	Avoid breathing vapors or mists May cause irritation of respiratory tract
Kit Component	*6 Red HRP-Linked Antibodies
Inhalation	Avoid breathing vapors or mists May cause irritation of respiratory tract

Eye contact

Kit Component	STOP Solution
Eye contact	May cause irreversible damage to eyes
Kit Component	ELISA Wash Buffer (20X)
Eye contact	Expected to be an irritant based on components
Kit Component	Cell Lysis Buffer (10X)
Eye contact	Expected to be an irritant based on components
Kit Component	*6 Red HRP-Linked Antibodies
Eye contact	Contact with eyes may cause irritation

Skin contact

Kit Component	STOP Solution
Skin contact	Corrosive to skin. Prolonged contact with skin is harmful
Kit Component	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	*6 Red HRP-Linked Antibodies
Skin contact	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons

Ingestion

Kit Component	STOP Solution
Ingestion	Ingestion causes burns of the upper digestive and respiratory tract. Harmful if swallowed
Kit Component	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	STOP Solution

Skin corrosion/irritation	Causes burns
Serious eye damage/eye irritation	Risk of serious damage to eyes

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

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

Sensitization

Kit Component	STOP Solution
Skin Sensitization	May cause skin sensitization

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

Kit Component	*6 Red HRP-Linked Antibodies
Skin Sensitization	Product is or contains a sensitizer. May cause an allergic skin reaction.

Mutagenic effects

Kit Component	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	STOP Solution
STOT - single exposure	Respiratory system

Aspiration Hazard No information available.

SECTION 12: Ecological information

12.1. Toxicity

Product Information

Kit Component	STOP Solution
Ecotoxicity	Toxic to aquatic life

Kit Component	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)phenylether	-	LC50 8.9 mg/l (Pimephales promelas) 96 h	EC50 26 mg/l (Daphnia) 48 h

trometamol	-	-	NOEC >100 mg/L (Selenastrum capricornutum) 96 h
maleic acid	-	LC50 5 mg/L (Pimephales promelas) 96 h	EC50 250 - 400 mg/L (Daphnia magna) 48 h
sodium azide	EC50 0.35 mg/L (Pseudokirchneriella subcapitata) 96 h	LC50 0.8 mg/L (Oncorhynchus mykiss) 96 h LC50 5.46 mg/L (Pimephales promelas) 96 h LC50 0.7 mg/L (Lepomis macrochirus) 96 h	LC100 1 mg/L (Orconectes rusticus) 96 h
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)	EC50 0.11 - 0.16 mg/L (Pseudokirchneriella subcapitata) 72 h EC50 0.31 mg/L (Anabaena flos-aquae) 120 h EC50 0.03 - 0.13 mg/L (Pseudokirchneriella subcapitata) 96 h	LC50 1.6 mg/L (Oncorhynchus mykiss) 96 h	EC50 4.71 mg/L (Daphnia magna) 48 h EC50 0.71 - 0.99 mg/L (Daphnia magna) 48 h EC50 0.12 - 0.3 mg/L (Daphnia magna) 48 h

12.2. Persistence and degradability

.

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

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

12.3. Bioaccumulative potential

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Kit Component: STOP Solution
Bioaccumulation: Not likely to bioaccumulate

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

Chemical Name	Octanol-Water Partition Coefficient
maleic acid	0.32

12.4. Mobility in soil

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

Kit Component: 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. Other adverse effects

No information available

Chemical Name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether	Group III Chemical	-	-

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
EmS No.	F-A, S-B
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	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
Classification Code	C3
Tunnel Restriction Code	(E)

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
Special provisions	A3, A803
ERG code	8L

SECTION 15: Regulatory information

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

Candidate List of Substances of Very High Concern for Authorization Information

Chemical Name	Candidate List of Substances of Very High Concern for Authorization Information
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether (10 - 20%)	Reason for inclusion Endocrine disrupting properties, Article 57f - environment

SEVESO Directive Information

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

International inventories

TSCA 8(b)	-
DSL/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

H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H412 - Harmful to aquatic life with long lasting effects

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

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.