



Safety Data Sheet (SDS) According to the OSHA Hazard Communication Standard 29 CFR 1910.1200

Issuing Date: 2018-07-16

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Version: 2

SECTION 1. Identification

Product identifier

Product No 54164
Product name FastScan™ Phospho-p70 S6 Kinase (Thr389) ELISA Kit
Kit Component
77217: p70 S6 Kinase Rabbit Capture mAb
17081: Phospho-p70 S6 Kinase (Thr 389) Mouse 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)
23521: FastScan™ ELISA Kit #54164 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

UN number UN3265

Recommended use of the chemical and restrictions on use

Identified uses This product is intended for research purposes only.

Manufacturer, importer, supplier

Manufacturer address 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
Email address support@cellsignal.com
Emergency telephone number In case of emergency call CHEMTREC 1-800-424-9300

SECTION 2. Hazard(s) identification

Classification

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
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1

GHS Label elements, including precautionary statements**Signal Word**

Danger

Hazard statement(s)

May cause an allergic skin reaction.

Causes severe skin burns and eye damage.

Precautionary Statement(s)

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash face, hands and any exposed skin thoroughly after handling.

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

Contaminated work clothing should not be allowed out of the workplace.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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

Wash contaminated clothing before reuse

If skin irritation or rash occurs: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a POISON CENTER or doctor/physician

Store locked up.

Dispose of contents/container to an approved waste disposal plant.

Supplementary Hazard Information**Hazards not otherwise classified (HNOC)**

Harmful to aquatic life with long lasting effects.

SECTION 3. Composition/information on ingredients
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Kit Component

16076: FastScan™ ELISA Capture Antibody Diluent

WARNING: May cause an allergic skin reaction.

Chemical name	CAS No	Weight-%
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC	55965-84-9	0.0025-0.0125

no. 220-239-6] (3:1)		
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Kit Component 28120: FastScan™ ELISA HRP Antibody Diluent

WARNING: May cause an allergic skin reaction.

Chemical name	CAS No	Weight-%
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

Kit Component 7002: STOP Solution

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

Chemical name	CAS No	Weight-%
maleic acid	110-16-7	3-7

Kit Component 9801: ELISA Wash Buffer (20X)

WARNING: May cause an allergic skin reaction.

Chemical name	CAS No	Weight-%
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

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-%
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether	9002-93-1	1-<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)	55965-84-9	0.0025-0.0125

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-%
sodium dodecyl sulphate	151-21-3	1-3
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)	55965-84-9	0.001-0.005

Kit Component 23521: FastScan™ ELISA Kit #54164 Positive Control Type 1

WARNING: May cause an allergic skin reaction

Chemical name	CAS No	Weight-%
sodium dodecyl sulphate	151-21-3	0.1-<1
sodium fluoride	7681-49-4	1-3
trisodium tetraoxovanadate	13721-39-6	1-3
alpha-toluenesulphonyl fluoride	329-98-6	0.1-<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)	55965-84-9	0.0015-<0.06

Kit Component **77217: p70 S6 Kinase Rabbit Capture mAb**
17081: Phospho-p70 S6 Kinase (Thr 389) Mouse HRP-linked mAb
7004: TMB Substrate

These products do not contain substances at concentrations requiring disclosure under 29 CFR 1910.1200 (OSHA Hazard Communication Standard).

SECTION 4. First-aid measures

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.
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.
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.
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.

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.

Indication of any immediate medical attention and special treatment needed

May cause sensitization by inhalation and skin contact. Treat symptomatically.

Advice for emergency responders

General advice	Call a doctor immediately if allergic signs, particularly in the respiratory tract, are observed.
Protection of first-aiders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves

SECTION 5. Fire-fighting measures

Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
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Specific hazards arising from the chemical

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.

Explosion Data

Sensitivity to Mechanical Impact	None
Sensitivity to Static Discharge	None

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. Accidental release measures

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.
Other information	No information available.

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.

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.

SECTION 7. Handling and storage

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.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions	Keep container tightly closed in a dry and well-ventilated place. Protect from light.
Packaging material	No information available
Incompatible products	Acids, Alkalis, Strong acids, Strong bases, Strong oxidizing agents, Strong reducing agents, Metals

SECTION 8. Exposure controls/personal protection

Control parameters

Occupational exposure limit values			
Chemical name	ACGIH TLV	OSHA PEL	NIOSH REL
sodium fluoride	TWA : 2.5 mg/m ³	TWA : 2.5 mg/m ³	IDLH : 250 mg/m ³ TWA : 2.5 mg/m ³
trisodium tetraoxovanadate	-	-	Ceiling: 0.05 mg/m ³

Appropriate engineering controls

Showers, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment

Personal protective equipment (PPE) needs to be selected depending on the implemented engineering controls, frequency/duration of work activities and the concentrations of the hazardous substance.

Eye/face protection

Safety glasses with side-shields.

Skin and body protection

Wear protective gloves/clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Provide regular cleaning of equipment, work area and clothing.

SECTION 9. 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.

Information on basic physical and chemical properties**Kit Component****77217: p70 S6 Kinase Rabbit Capture mAb**

Physical state

Solid

Appearance

Lyophilized, Powder

Color

Green

Kit Component**17081: Phospho-p70 S6 Kinase (Thr 389) Mouse 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 **23521: FastScan™ ELISA Kit #54164 Positive Control Type 1**

Physical state	Solid
Appearance	Lyophilized, Powder
Color	White

SECTION 10. Stability and reactivity

Reactivity

No information available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Hazardous reactions	None under normal processing.
Hazardous polymerization	None under normal processing.

Conditions to Avoid

Excessive heat, Exposure to air or moisture over prolonged periods

Incompatible Materials

Acids, Alkalies, Strong acids, Strong bases, Strong oxidizing agents, Strong reducing agents, Metals

Hazardous Decomposition Products

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

SECTION 11. Toxicological information
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Information on likely routes of exposure**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.

Inhalation

Kit Component Inhalation	77217: p70 S6 Kinase Rabbit Capture mAb May cause allergic respiratory reaction
Kit Component Inhalation	17081: Phospho-p70 S6 Kinase (Thr 389) Mouse 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 May cause irritation of respiratory tract
Kit Component Inhalation	69905: FastScan™ ELISA Cell Extraction Buffer (5X) May cause irritation of respiratory tract

Eye contact

Kit Component Eye contact	77217: p70 S6 Kinase Rabbit Capture mAb May cause slight irritation
Kit Component Eye contact	17081: Phospho-p70 S6 Kinase (Thr 389) Mouse 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	77217: p70 S6 Kinase Rabbit Capture mAb Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
Kit Component Skin contact	17081: Phospho-p70 S6 Kinase (Thr 389) Mouse 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	23521: FastScan™ ELISA Kit #54164 Positive Control Type 1 Irritating to skin

Ingestion

Kit Component Ingestion	77217: p70 S6 Kinase Rabbit Capture mAb Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea
Kit Component Ingestion	17081: Phospho-p70 S6 Kinase (Thr 389) Mouse 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

Information on toxicological effects**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)phenylet her	= 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

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

77217: p70 S6 Kinase Rabbit Capture mAb

Respiratory Sensitizer
May cause skin sensitization

Kit Component

Respiratory Sensitization
Skin Sensitization

17081: Phospho-p70 S6 Kinase (Thr 389) Mouse 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

23521: FastScan™ ELISA Kit #54164 Positive Control Type 1

May cause skin sensitization

Mutagenic effects

Kit Component
Mutagenic effects

7002: STOP Solution
Not mutagenic in AMES Test

Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identifiable as probable, possible or confirmed carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity

No information available.

Systemic Target Organ Toxicity (STOT)

Kit Component
STOT - single exposure

7002: STOP Solution
Respiratory system

Aspiration Hazard

No information available.

SECTION 12. Ecological information

Ecotoxicity**Product Information**

Kit Component
Ecotoxicity

9801: ELISA Wash Buffer (20X)
Harmful to aquatic life with long lasting effects

Component Information

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
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
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	EC50 98 mg/L (Daphnia magna) 48 h EC50 338 mg/L (Daphnia magna) 48 h

		LC50 38 - 68 mg/L (Oncorhynchus mykiss) 96 h LC50 830 mg/L (Lepomis macrochirus) 96 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

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

Bioaccumulation

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

Mobility

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

Other adverse effects

No information available.

SECTION 13. Disposal considerations

Waste Disposal Methods

Dispose of in accordance with all applicable national environmental laws and regulations.

Disposal considerations

Do not empty into drains; dispose of this material and its container in a safe way. Dispose of wastes in an approved waste disposal facility.

SECTION 14. Transport information

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

DOT

UN number UN3265
UN proper shipping name Corrosive liquid, acidic, organic, n.o.s. (maleic acid)
Transport hazard class(es) 8
Packing group III

IATA

UN number UN3265
UN proper shipping name Corrosive liquid, acidic, organic, n.o.s. (maleic acid)
Transport hazard class(es) 8
Packing group III

SECTION 15. Regulatory information**North American Inventory Listing**

Refer to kit component SDS for full Toxic Substance Control Act (TSCA) reporting requirements.

Chemical name	TSCA 8(b)	TSCA 12(b)	DSL	NDSL
maleic acid	Listed	Not Listed	Listed	Not Listed
sodium dodecyl sulphate	Listed	Not Listed	Listed	Not Listed
sodium fluoride	Listed	Not Listed	Listed	Not Listed
trisodium tetraoxovanadate	Listed	Not Listed	Listed	Not Listed
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether	Listed	Not Listed	Listed	Not Listed
alpha-toluenesulphonyl fluoride	Listed	Not Listed	Listed	Not Listed
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)	Not Listed	Section 5: 1 %	Listed	Not Listed

SARA 313

Refer to kit component SDS for full SARA Section 313 reporting requirements.

Chemical name	CAS No	SARA 313 - Threshold Values %
trisodium tetraoxovanadate	13721-39-6	1.0
trisodium tetraoxovanadate	13721-39-6	1.0
magnesium nitrate	10377-60-3	1.0
copper dinitrate	3251-23-8	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard No
Chronic Health Hazard No
Fire Hazard No
Sudden Release of Pressure Hazard No
Reactive Hazard No

Clean Water Act

Refer to kit component SDS for full Clean Water Act (CWA) reporting requirements.

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances	CWA - Bioaccumulative Chemicals of Concern (BCCs)
maleic acid	5000 lb	Not Listed	Not Listed	Listed	Not Listed
sodium fluoride	1000 lb	Not Listed	Not Listed	Listed	Not Listed

CERCLA

Refer to kit component SDS for full Comprehensive Environmental Response Compensation and Liability Act (CERCLA) reporting requirements.

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
maleic acid	5000 lb	Not Listed
sodium fluoride	1000 lb	Not Listed

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Refer to kit component SDS for applicable State Right-To-Know (RTK) information.

Chemical name	New Jersey	Massachusetts	Pennsylvania
sucrose	Not Listed	Listed	Not Listed
maleic acid	Listed	Listed	Listed
Sodium Phosphate Dibasic Heptahydrate	Listed	Listed	Listed
sodium fluoride	Listed	Listed	Listed
trisodium tetraoxovanadate	Listed	Not Listed	Not Listed
disodium hydrogenorthophosphate	Listed	Listed	Listed
trisodium tetraoxovanadate	Listed	Not Listed	Not Listed
magnesium nitrate	Listed	Listed	Listed
copper dinitrate	Listed	Listed	Listed

SECTION 16. Other information

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Disclaimer

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

End of Safety Data Sheet