



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

Issuing Date: 2018-07-16

Revision Date: 2024-07-11

Version: 3

SECTION 1. Identification

Product identifier

Product No 58537
Product name FastScan™ Phospho-Tau (Thr181) ELISA Kit
Kit Component
67317: Tau Rabbit Capture mAb
78127: Phospho-Tau (Thr181) 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)
85630: FastScan™ ELISA Kit #58537 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

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)

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 85630: FastScan™ ELISA Kit #58537 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 **67317: Tau Rabbit Capture mAb**
78127: Phospho-Tau (Thr181) Rabbit 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 |
|-------------------------------------|--|

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**

Physical state
Appearance
Color

67317: Tau Rabbit Capture mAb

Solid
Lyophilized, Powder
Green

Kit Component

Physical state
Appearance
Color

78127: Phospho-Tau (Thr181) Rabbit HRP-linked mAb

Solid
Lyophilized, Powder
Red

Kit Component

Physical state
Appearance
Color
pH
Remarks

16076: FastScan™ ELISA Capture Antibody Diluent

Liquid
Clear
Green
7.4
@ 20 °C

Kit Component

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

28120: FastScan™ ELISA HRP Antibody Diluent

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

Kit Component

Physical state

7004: TMB Substrate

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 **85630: FastScan™ ELISA Kit #58537 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 |
|--|

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 | 67317: Tau Rabbit Capture mAb May cause allergic respiratory reaction |
| Kit Component Inhalation | 78127: Phospho-Tau (Thr181) Rabbit HRP-linked mAb May cause allergic respiratory reaction |
| Kit Component Inhalation | 28120: FastScan™ ELISA HRP Antibody Diluent May cause irritation of respiratory tract |
| Kit Component Inhalation | 7002: STOP Solution Aerosol expected to be irritating based on components |
| Kit Component Inhalation | 9801: ELISA Wash Buffer (20X) Avoid breathing vapors or mists 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 | 67317: Tau Rabbit Capture mAb May cause slight irritation |
| Kit Component Eye contact | 78127: Phospho-Tau (Thr181) Rabbit HRP-linked mAb May cause slight irritation |
| Kit Component Eye contact | 28120: FastScan™ ELISA HRP Antibody Diluent May cause temporary eye irritation |
| Kit Component Eye contact | 7002: STOP Solution May cause irreversible damage to eyes |
| Kit Component Eye contact | 9801: ELISA Wash Buffer (20X) Expected to be an irritant based on components |
| Kit Component Eye contact | 69905: FastScan™ ELISA Cell Extraction Buffer (5X) May cause irritation |
| Kit Component Eye contact | 25243: FastScan™ ELISA Cell Extraction Enhancer Solution (50X) May cause irritation |

Skin contact

| | |
|--------------------------------------|--|
| Kit Component Skin contact | 67317: Tau Rabbit Capture mAb Repeated or prolonged skin contact may cause allergic reactions with susceptible persons |
| Kit Component Skin contact | 78127: Phospho-Tau (Thr181) Rabbit HRP-linked mAb Repeated or prolonged skin contact may cause allergic reactions with susceptible persons |
| Kit Component Skin contact | 16076: FastScan™ ELISA Capture Antibody Diluent Repeated or prolonged skin contact may cause allergic reactions with susceptible persons |
| Kit Component Skin contact | 28120: FastScan™ ELISA HRP Antibody Diluent May cause irritation |
| Kit Component Skin contact | 7002: STOP Solution Corrosive to skin Prolonged contact with skin is harmful |
| Kit Component Skin contact | 9801: ELISA Wash Buffer (20X) Repeated or prolonged skin contact may cause allergic reactions with susceptible persons Expected to be an irritant based on components |
| Kit Component Skin contact | 25243: FastScan™ ELISA Cell Extraction Enhancer Solution (50X) May cause sensitization by skin contact |
| Kit Component Skin contact | 85630: FastScan™ ELISA Kit #58537 Positive Control Type 1 Irritating to skin |

Ingestion

| | |
|-----------------------------------|--|
| Kit Component Ingestion | 67317: Tau Rabbit Capture mAb Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea |
| Kit Component Ingestion | 78127: Phospho-Tau (Thr181) Rabbit HRP-linked mAb Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea |
| Kit Component Ingestion | 28120: FastScan™ ELISA HRP Antibody Diluent Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea |
| Kit Component Ingestion | 7002: STOP Solution Ingestion causes burns of the upper digestive and respiratory tract. Harmful if swallowed |
| Kit Component Ingestion | 9801: ELISA Wash Buffer (20X) Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea |
| Kit Component Ingestion | 69905: FastScan™ ELISA Cell Extraction Buffer (5X) Ingestion may cause irritation to mucous membranes |

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

67317: Tau Rabbit Capture mAb

Respiratory Sensitizer
May cause skin sensitization

Kit Component

Respiratory Sensitization
Skin Sensitization

78127: Phospho-Tau (Thr181) Rabbit HRP-linked mAb

Respiratory Sensitizer
May cause skin sensitization

Kit Component

Skin Sensitization

16076: FastScan™ ELISA Capture Antibody Diluent

As a precaution the product should be treated as a sensitizer

Kit Component

Skin Sensitization

28120: FastScan™ ELISA HRP Antibody Diluent

May cause skin sensitization

Kit Component

Skin Sensitization

7002: STOP Solution

May cause skin sensitization

Kit Component

Skin Sensitization

9801: ELISA Wash Buffer (20X)

Product is or contains a sensitizer. May cause an allergic skin reaction

Kit Component

Skin Sensitization

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

As a precaution the product should be treated as a sensitizer

Kit Component

Skin Sensitization

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

As a precaution the product should be treated as a sensitizer

Kit Component

Skin Sensitization

85630: FastScan™ ELISA Kit #58537 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

Issuing Date: 2018-07-16

Revision Date: 2024-07-11

Disclaimer

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

End of Safety Data Sheet