



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

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

**Revision Date:** 2025-02-26

**Version:** 3

## SECTION 1. Identification

### Product identifier

**Product No** 7048

**Product name** PathScan® Phospho-Akt2 (Ser474) Sandwich ELISA Kit II

**Kit Component**

- 83094: Phospho-Akt (Ser473) Rabbit mAb Coated Microwells
- 5608: Akt2 Mouse Detection mAb
- 13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)
- 13339: Detection Antibody Diluent
- 13515: HRP Diluent
- 11083: ELISA Sample Diluent
- 7004: TMB Substrate
- 7002: STOP Solution
- 9801: ELISA Wash Buffer (20X)
- 9803: Cell Lysis Buffer (10X)

### Hazardous Components

**13515: HRP Diluent**

**7002: STOP Solution**

**9801: ELISA Wash Buffer (20X)**

**9803: Cell Lysis Buffer (10X)**

**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](http://www.cellsignal.com)

**Email address** [support@cellsignal.com](mailto: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 |
| Chronic aquatic toxicity          | Category 3 |

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

Danger

**Hazard statement(s)**

Causes severe skin burns and eye damage

May cause an allergic skin reaction

Harmful to aquatic life with long lasting effects

**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.

Avoid release to the environment.

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

**Supplementary Hazard Information**

May produce an allergic reaction.

**Hazards not otherwise classified (HNOC)**

Not applicable.

**SECTION 3. Composition/information on ingredients****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<br>5-chloro-2-methyl-4-isothiazolin-3-one and<br>2-methyl-2H -isothiazol-3-one | 55965-84-9 | 0.005-0.025 |

**Kit Component 11083: ELISA Sample Diluent**

| Chemical name | CAS No     | Weight-% |
|---------------|------------|----------|
| sodium azide  | 26628-22-8 | <0.1     |

**Kit Component 9803: Cell Lysis Buffer (10X)**

DANGER: Causes serious eye damage. Causes skin irritation. Harmful to aquatic life with long lasting effects.

| Chemical name                                                  | CAS No     | Weight-% |
|----------------------------------------------------------------|------------|----------|
| polyethylene glycol<br>p-(1,1,3,3-tetramethylbutyl)phenylether | 9002-93-1  | 10       |
| trometamol                                                     | 77-86-1    | 1.79     |
| tetrasodium pyrophosphate, decahydrate                         | 13472-36-1 | 0.1-1    |

**Kit Component 13339: Detection Antibody Diluent**

| Chemical name | CAS No     | Weight-% |
|---------------|------------|----------|
| trometamol    | 77-86-1    | 0.5      |
| sodium azide  | 26628-22-8 | <0.1     |

**Kit Component 13515: HRP Diluent**

WARNING: May cause an allergic skin reaction.

| Chemical name                                                                                   | CAS No     | Weight-%    |
|-------------------------------------------------------------------------------------------------|------------|-------------|
| reaction mass of<br>5-chloro-2-methyl-4-isothiazolin-3-one and<br>2-methyl-2H -isothiazol-3-one | 55965-84-9 | 0.005-0.025 |
| trometamol                                                                                      | 77-86-1    | 0.5         |

**Kit Component**  
**83094: Phospho-Akt (Ser473) Rabbit mAb Coated Microwells**  
**5608: Akt2 Mouse Detection mAb**  
**13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)**  
**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

|                     |                                                                                                                                   |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| <b>Eye contact</b>  | Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. |
| <b>Skin contact</b> | Wash off immediately with soap and plenty of water removing all contaminated clothes and                                          |

|                   |                                                                                                                                                                                                                                                                    |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b> | shoes. Immediate medical attention is required.<br>IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.                                                                                                                       |
| <b>Ingestion</b>  | Get medical attention immediately if symptoms occur. If breathing is difficult, give oxygen.<br>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. |

**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.

**Indication of any immediate medical attention and special treatment needed**

Probable mucosal damage may contraindicate the use of gastric lavage.

**Advice for emergency responders**

|                                   |                                                                                                                 |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>General advice</b>             | For further assistance, contact your local Poison Control Center.                                               |
| <b>Protection of first-aiders</b> | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves |

**SECTION 5. Fire-fighting measures****Extinguishing media**

|                                     |                                                                                                         |
|-------------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Suitable Extinguishing Media</b> | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
|-------------------------------------|---------------------------------------------------------------------------------------------------------|

**Specific hazards arising from the chemical**

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.

**Explosion Data**

|                                         |      |
|-----------------------------------------|------|
| <b>Sensitivity to Mechanical Impact</b> | None |
| <b>Sensitivity to Static Discharge</b>  | 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**

|                                    |                                                                                                                                                                                               |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>For non-emergency personnel</b> | Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Ensure adequate ventilation. |
| <b>Other information</b>           | Refer to protective measures listed in Sections 7 and 8.                                                                                                                                      |

**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.

**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.

## SECTION 7. Handling and storage

**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.

**Conditions for safe storage, including any incompatibilities****Technical measures/Storage conditions**

Keep away from direct sunlight. Keep containers tightly closed in a dry, cool and well-ventilated place.

**Packaging material**

No information available

**Incompatible products**

Incompatible with strong acids and bases, Incompatible with oxidizing agents

## SECTION 8. Exposure controls/personal protection

**Control parameters**

| Occupational exposure limit values     |                                                      |          |                                                    |
|----------------------------------------|------------------------------------------------------|----------|----------------------------------------------------|
| Chemical name                          | ACGIH TLV                                            | OSHA PEL | NIOSH REL                                          |
| tetrasodium pyrophosphate, decahydrate | -                                                    | -        | TWA : 5 mg/m <sup>3</sup>                          |
| sodium azide                           | Ceiling: 0.29 mg/m <sup>3</sup><br>Ceiling: 0.11 ppm | -        | Ceiling: 0.1 ppm<br>Ceiling: 0.3 mg/m <sup>3</sup> |

**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**

Tightly fitting safety goggles. Face-shield.

**Skin and body protection**

Wear protective gloves/clothing.

**Respiratory protection**

In case of insufficient ventilation wear suitable respiratory equipment.

**Hygiene measures**

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. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection.

## 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**

|                      |                                                                      |
|----------------------|----------------------------------------------------------------------|
| <b>Kit Component</b> | <b>7004: TMB Substrate</b>                                           |
| Physical state       | Liquid                                                               |
| Appearance           | Clear                                                                |
| Color                | Light yellow                                                         |
| pH                   | 3.3-3.8 (20 °C)                                                      |
| <b>Kit Component</b> | <b>7002: STOP Solution</b>                                           |
| Physical state       | Liquid                                                               |
| Appearance           | Clear                                                                |
| Color                | Colorless                                                            |
| pH                   | 1.2 (20 °C)                                                          |
| <b>Kit Component</b> | <b>9801: ELISA Wash Buffer (20X)</b>                                 |
| Physical state       | Liquid                                                               |
| Appearance           | Clear                                                                |
| Color                | Colorless                                                            |
| pH                   | 6.4 (20 °C)                                                          |
| <b>Kit Component</b> | <b>11083: ELISA Sample Diluent</b>                                   |
| Physical state       | Liquid                                                               |
| Appearance           | Clear                                                                |
| Color                | Blue                                                                 |
| pH                   | 7.1 (20 °C)                                                          |
| <b>Kit Component</b> | <b>9803: Cell Lysis Buffer (10X)</b>                                 |
| Physical state       | Liquid                                                               |
| Appearance           | Clear                                                                |
| Color                | Colorless                                                            |
| pH                   | 7.5 (20 °C)                                                          |
| <b>Kit Component</b> | <b>5608: Akt2 Mouse Detection mAb</b>                                |
| Physical state       | Solid                                                                |
| Appearance           | Lyophilized, Powder                                                  |
| Color                | Green                                                                |
| <b>Kit Component</b> | <b>13339: Detection Antibody Diluent</b>                             |
| Physical state       | Liquid                                                               |
| Appearance           | Clear                                                                |
| Color                | Green                                                                |
| pH                   | 7.4 (20 °C)                                                          |
| <b>Kit Component</b> | <b>13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)</b> |
| Physical state       | Solid                                                                |
| Appearance           | Lyophilized, Powder                                                  |
| Color                | Red                                                                  |
| <b>Kit Component</b> | <b>13515: HRP Diluent</b>                                            |
| Physical state       | Liquid                                                               |
| Appearance           | Clear                                                                |
| Color                | Red                                                                  |
| pH                   | 7.4 (20 °C)                                                          |
| <b>Kit Component</b> | <b>83094: Phospho-Akt (Ser473) Rabbit mAb Coated Microwells</b>      |
| Physical state       | Solid                                                                |

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**SECTION 10. Stability and reactivity****Reactivity**

No information available.

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

|                                 |                               |
|---------------------------------|-------------------------------|
| <b>Hazardous reactions</b>      | None under normal processing. |
| <b>Hazardous polymerization</b> | None under normal processing. |

**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.

**Incompatible Materials**

Incompatible with strong acids and bases, Incompatible with oxidizing agents

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of toxic/corrosive gases and vapors

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

**Inhalation**

|                                    |                                                                                                                   |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Kit Component</b><br>Inhalation | <b>7002: STOP Solution</b><br>Aerosol expected to be irritating based on components                               |
| <b>Kit Component</b><br>Inhalation | <b>9801: ELISA Wash Buffer (20X)</b><br>Avoid breathing vapors or mists May cause irritation of respiratory tract |
| <b>Kit Component</b><br>Inhalation | <b>5608: Akt2 Mouse Detection mAb</b><br>May cause allergic respiratory reaction                                  |
| <b>Kit Component</b><br>Inhalation | <b>13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)</b><br>May cause allergic respiratory reaction   |
| <b>Kit Component</b><br>Inhalation | <b>13515: HRP Diluent</b><br>Avoid breathing vapors or mists May cause irritation of respiratory tract            |

**Eye contact**

|                                     |                                                                                        |
|-------------------------------------|----------------------------------------------------------------------------------------|
| <b>Kit Component</b><br>Eye contact | <b>7002: STOP Solution</b><br>May cause irreversible damage to eyes                    |
| <b>Kit Component</b><br>Eye contact | <b>9801: ELISA Wash Buffer (20X)</b><br>Expected to be an irritant based on components |
| <b>Kit Component</b><br>Eye contact | <b>9803: Cell Lysis Buffer (10X)</b><br>Expected to be an irritant based on components |
| <b>Kit Component</b><br>Eye contact | <b>13515: HRP Diluent</b><br>Contact with eyes may cause irritation                    |

**Skin contact**

|                                      |                                                                                                                                                                                     |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Kit Component</b><br>Skin contact | <b>7002: STOP Solution</b><br>Corrosive to skin Prolonged contact with skin is harmful                                                                                              |
| <b>Kit Component</b><br>Skin contact | <b>9801: ELISA Wash Buffer (20X)</b><br>Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.<br>Expected to be an irritant based on components |
| <b>Kit Component</b><br>Skin contact | <b>5608: Akt2 Mouse Detection mAb</b><br>Repeated or prolonged skin contact may cause allergic reactions with susceptible persons                                                   |
| <b>Kit Component</b><br>Skin contact | <b>13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)</b><br>Repeated or prolonged skin contact may cause allergic reactions with susceptible persons                    |
| <b>Kit Component</b><br>Skin contact | <b>13515: HRP Diluent</b><br>Repeated or prolonged skin contact may cause allergic reactions with susceptible persons                                                               |

**Ingestion**

|                                   |                                                                                                                          |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>Kit Component</b><br>Ingestion | <b>7002: STOP Solution</b><br>Ingestion causes burns of the upper digestive and respiratory tract. Harmful if swallowed. |
| <b>Kit Component</b><br>Ingestion | <b>9801: ELISA Wash Buffer (20X)</b><br>Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.  |

**Information on toxicological effects****Component Information**

| Chemical name                                                                               | LD50 Oral                                                  | LD50 Dermal                                        | LC50 Inhalation                                    |
|---------------------------------------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------|
| polyethylene glycol<br>p-(1,1,3,3-tetramethylbutyl)phenylether                              | = 1700 mg/kg (Rat)<br>= 1800 mg/kg (Rat)                   | -                                                  | -                                                  |
| maleic acid                                                                                 | 708 mg/kg ( Rat )                                          | 1,560 mg/kg ( Rabbit )                             | > 0.72 mg/L ( Rat ) 1h                             |
| trometamol                                                                                  | 5900 mg/kg ( Rat )                                         | > 5000 mg/kg ( Rat )                               | -                                                  |
| tetrasodium pyrophosphate,<br>decahydrate                                                   | -                                                          | > 2000 mg/kg ( Rabbit )                            | -                                                  |
| sodium azide                                                                                | = 27 mg/kg (Rat)                                           | = 20 mg/kg ( Rabbit ) = 50 mg/kg ( Rat )           | -                                                  |
| reaction mass of<br>5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one | = 481 mg/kg (Rat)<br>= 120 mg/kg (Rat)<br>= 53 mg/kg (Rat) | = 200 mg/kg ( Rabbit )<br>= 87.12 mg/kg ( Rabbit ) | = 1.23 mg/L ( Rat ) 4 h<br>= 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. 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**

|                                   |                                |
|-----------------------------------|--------------------------------|
| <b>Kit Component</b>              | <b>7002: STOP Solution</b>     |
| Serious eye damage/eye irritation | Risk of serious damage to eyes |
| Skin corrosion/irritation         | Causes burns                   |

|                                   |                                      |
|-----------------------------------|--------------------------------------|
| <b>Kit Component</b>              | <b>9801: ELISA Wash Buffer (20X)</b> |
| Serious eye damage/eye irritation | Causes serious eye irritation        |
| Skin corrosion/irritation         | Causes skin irritation               |

|                                   |                                      |
|-----------------------------------|--------------------------------------|
| <b>Kit Component</b>              | <b>9803: Cell Lysis Buffer (10X)</b> |
| Serious eye damage/eye irritation | Irritating to eyes                   |

**Sensitization**

|                      |                              |
|----------------------|------------------------------|
| <b>Kit Component</b> | <b>7002: STOP Solution</b>   |
| Skin Sensitization   | May cause skin sensitization |

|                      |                                                                          |
|----------------------|--------------------------------------------------------------------------|
| <b>Kit Component</b> | <b>9801: ELISA Wash Buffer (20X)</b>                                     |
| Skin Sensitization   | Product is or contains a sensitizer. May cause an allergic skin reaction |

|                           |                                                                           |
|---------------------------|---------------------------------------------------------------------------|
| <b>Kit Component</b>      | <b>5608: Akt2 Mouse Detection mAb</b>                                     |
| Respiratory Sensitization | May cause allergy or asthma symptoms or breathing difficulties if inhaled |
| Skin Sensitization        | May cause skin sensitization                                              |

|                           |                                                                           |
|---------------------------|---------------------------------------------------------------------------|
| <b>Kit Component</b>      | <b>13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)</b>      |
| Respiratory Sensitization | May cause allergy or asthma symptoms or breathing difficulties if inhaled |
| Skin Sensitization        | May cause skin sensitization                                              |

|                      |                                                                          |
|----------------------|--------------------------------------------------------------------------|
| <b>Kit Component</b> | <b>13515: HRP Diluent</b>                                                |
| Skin Sensitization   | Product is or contains a sensitizer. May cause an allergic skin reaction |

**Mutagenic effects**

|                      |                            |
|----------------------|----------------------------|
| <b>Kit Component</b> | <b>7002: STOP Solution</b> |
| Mutagenic effects    | 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**

**Kit Component**  
Ecotoxicity

**7002: STOP Solution**  
Toxic to aquatic life

**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                                                                            |
|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 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                                                                                                    |
| maleic acid                                                                              | -                                                                                                                            | LC50 5 mg/L (Pimephales promelas) 96 h                                                                                            | EC50 250 - 400 mg/L (Daphnia magna) 48 h                                                                                       |
| trometamol                                                                               | -                                                                                                                            | -                                                                                                                                 | NOEC >100 mg/L (Selenastrum capricornutum) 96 h                                                                                |
| sodium azide                                                                             | EC50 0.35 mg/L (Pseudokirchneriella subcapitata) 96 h                                                                        | LC50 0.8 mg/L (Oncorhynchus mykiss) 96 h<br>LC50 0.7 mg/L (Lepomis macrochirus) 96 h<br>LC50 5.46 mg/L (Pimephales promelas) 96 h | LC100 1 mg/L (Orconectes rusticus) 96 h                                                                                        |
| reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one | EC50 0.11 - 0.16 mg/L (Pseudokirchneriella subcapitata) 72 h<br>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<br>EC50 0.12 - 0.3 mg/L (Daphnia magna) 48 h<br>EC50 0.71 - 0.99 mg/L (Daphnia magna) 48 h |

**Persistence and degradability**

**Kit Component**  
Persistence and degradability

**7002: STOP Solution**  
Product is biodegradable

**Kit Component**  
Persistence and degradability

**9801: ELISA Wash Buffer (20X)**  
Not readily biodegradable

**Bioaccumulation**

**Kit Component**  
Bioaccumulation

**7002: STOP Solution**  
Not likely to bioaccumulate

**Kit Component**  
Bioaccumulation

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

| Chemical name                                                                            | Octanol-Water Partition Coefficient |
|------------------------------------------------------------------------------------------|-------------------------------------|
| maleic acid                                                                              | -0.34                               |
| reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one | $\geq -0.32$ - $\leq 0.7$           |

**Mobility****Kit Component**

Mobility

**7002: STOP Solution**

Will likely be mobile in the environment due to its water solubility

**Kit Component**

Mobility

**9801: ELISA Wash Buffer (20X)**

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

**Excepted Quantity**

E1

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

| Chemical name                                                  | TSCA 8(b) | TSCA 12(b) | DSL    | NDSL       |
|----------------------------------------------------------------|-----------|------------|--------|------------|
| polyethylene glycol<br>p-(1,1,3,3-tetramethylbutyl)phenylether | Listed    | Not Listed | Listed | Not Listed |

|                                                                                                      |            |                      |        |            |
|------------------------------------------------------------------------------------------------------|------------|----------------------|--------|------------|
| maleic acid                                                                                          | Listed     | Not Listed           | Listed | Not Listed |
| trometamol                                                                                           | Listed     | Not Listed           | Listed | Not Listed |
| sodium azide                                                                                         | Listed     | Not Listed           | Listed | Not Listed |
| reaction mass of<br>5-chloro-2-methyl-4-isothiazolin-<br>3-one and 2-methyl-2H-<br>-isothiazol-3-one | Not Listed | Section 5(a)(2): 1 % | Listed | Not Listed |

**SARA 313**

| Chemical name              | CAS No     | SARA 313 - Threshold Values % |
|----------------------------|------------|-------------------------------|
| sodium azide               | 26628-22-8 | 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               | Yes |
| 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                                        |

**CERCLA**

| Chemical name | Hazardous Substances RQs | Extremely Hazardous Substances RQs |
|---------------|--------------------------|------------------------------------|
| maleic acid   | 5000 lb                  | Not Listed                         |
| sodium azide  | 1000 lb                  | 1000 lb                            |

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

| Chemical name                             | New Jersey | Massachusetts | Pennsylvania |
|-------------------------------------------|------------|---------------|--------------|
| water                                     | Not Listed | Not Listed    | Listed       |
| maleic acid                               | Listed     | Listed        | Listed       |
| disodium<br>hydrogenorthophosphate        | Listed     | Listed        | Listed       |
| tetrasodium pyrophosphate,<br>decahydrate | Listed     | Listed        | Listed       |
| sodium azide                              | Listed     | Listed        | Listed       |
| trisodium tetraoxovanadate                | Listed     | Not Listed    | Not Listed   |

|                   |            |        |            |
|-------------------|------------|--------|------------|
| FD&C Blue 1       | Not Listed | Listed | Not Listed |
| Magnesium nitrate | Listed     | Listed | Listed     |
| copper dinitrate  | Listed     | Listed | Listed     |

|                                      |
|--------------------------------------|
| <b>SECTION 16. Other information</b> |
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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