



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

Issuing Date: 2018-12-10

Version: 1

SECTION 1. Identification

Product identifier

Product No 8200
Product name PhosphoPlus® Akt (Ser473) Antibody Duet
Kit Component 4060: Phospho-Akt (Ser473) (D9E) XP® Rabbit mAb
4691: Akt (pan) (C67E7) Rabbit mAb

Recommended use of the chemical and restrictions on use

Identified uses For research use 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

This substance/mixture is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

GHS Label elements, including precautionary statements

Signal Word

Not classified.

Hazard statement(s)

None.

Precautionary Statement(s)

None.

Supplementary Hazard Information

May produce an allergic reaction.

Hazards not otherwise classified (HNOC)

Not applicable.

SECTION 3. Composition/information on ingredients

Kit Component

The following kit components contain the ingredients listed in the table below:

4060: Phospho-Akt (Ser473) (D9E) XP® Rabbit mAb
4691: Akt (pan) (C67E7) Rabbit mAb

| Chemical name | CAS No. | Weight-% |
|---------------|------------|----------|
| glycerol | 56-81-5 | 30-60 |
| sodium azide | 26628-22-8 | <0.02 |

SECTION 4. First-aid measures

Eye contact

Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing. Get medical attention immediately if irritation persists.

Skin contact

Wash skin with soap and water.

Inhalation

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately if symptoms occur.

Ingestion

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

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

Treat symptomatically.

Advice for emergency responders

General advice

For further assistance, contact your local Poison Control Center.

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.

Unsuitable Extinguishing Media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

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. For personal protection see section 8.
- Other information** No information available.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

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** Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

SECTION 7. Handling and storage

Precautions for safe handling

Wear personal protective equipment. See section 8. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

- Technical measures/Storage conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.
- Packaging material** No information available.
- Incompatible products** Strong oxidizing agents, Strong acids.

SECTION 8. Exposure controls/personal protection

Control parameters

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH REL |
|---------------|--|---|--|
| glycerol | - | TWA mist, total particulate: 15 mg/m ³ TWA mist, respirable fraction: 5 mg/m ³ | - |
| sodium azide | Ceiling: 0.29 mg/m ³ Ceiling: 0.11 ppm | - | Ceiling: 0.1 ppm Ceiling: 0.3 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** If splashes are likely to occur, wear: Tightly fitting safety goggles.
- Skin and body protection** Wear protective gloves/clothing.
- Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

Hygiene measures

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Handle in accordance with good industrial hygiene and safety practice.

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 | 4060: Phospho-Akt (Ser473) (D9E) XP® Rabbit mAb |
| Physical state | Liquid |
| Appearance | Clear |
| Color | Colorless |
| pH VALUE | 7.5 |
| Remarks | @ 20 °C |

| | |
|----------------------|---|
| Kit Component | 4691: Akt (pan) (C67E7) Rabbit mAb |
| Physical state | Liquid |
| Appearance | Clear |
| Color | Colorless |
| pH VALUE | 7.5 |
| Remarks | @ 20 °C |

SECTION 10. Stability and reactivity

Reactivity

No information available.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

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

Strong oxidizing agents. Strong acids.

Hazardous Decomposition Products

Nitrogen oxides (NO_x).

SECTION 11. Toxicological information

Information on likely routes of exposure**Product Information**

This product is for experimental uses only. The product has not been completely analyzed and all of the hazards may not be known. Please use caution while handling this product.

| | |
|---------------------|--|
| Inhalation | Avoid breathing vapors or mists May cause irritation of respiratory tract |
| Eye contact | Avoid contact with eyes May cause slight irritation |
| Skin contact | Avoid contact with skin |
| Ingestion | Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea |

Information on toxicological effects

Component Information

| Chemical name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------|---------------------|--|-------------------------------------|
| glycerol | = 12600 mg/kg (Rat) | > 10 g/kg (Rabbit) | > 570 mg/m ³ (Rat) 1 h |
| sodium azide | = 27 mg/kg (Rat) | = 20 mg/kg (Rabbit) = 50 mg/kg (Rat) | - |

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

| | |
|--|---|
| Symptoms | 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 | No information available |
| Sensitization | No information available |
| Mutagenic effects | No information available |
| 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) | No information available |
| Aspiration Hazard | No information available. |

SECTION 12. Ecological information

Ecotoxicity

Product Information No information available

Component Information

| Chemical name | Toxicity to algae | Toxicity to fish | Toxicity to daphnia and other aquatic invertebrates |
|---------------|---|---|---|
| glycerol | - | LC50 51 - 57 mL/L (Oncorhynchus mykiss) 96 h | EC50 500 mg/L (Daphnia magna) 24 h |
| sodium azide | EC50 0.35 mg/L (Pseudokirchneriella subcapitata) 96 h | LC50 0.8 mg/L (Oncorhynchus mykiss) 96 h LC50 5.46 mg/L (Pimephales promelas) 96 h LC50 0.7 mg/L (Lepomis macrochirus) 96 h | LC100 1 mg/L (Orconectes rusticus) 96 h |

Persistence and degradability No information available

Bioaccumulation

| Chemical name | Octanol-Water Partition Coefficient |
|---------------|-------------------------------------|
| glycerol | -1.76 |

Mobility No information available

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.

SECTION 14. Transport information

This material is not subject to regulation as a hazardous material for shipping.

SECTION 15. Regulatory information

North American Inventory Listing

| Chemical name | TSCA 8(b) | TSCA 12(b) | DSL | NDSL |
|---------------|-----------|------------|--------|------------|
| glycerol | Listed | Not Listed | Listed | Not Listed |
| sodium azide | Listed | Not Listed | Listed | Not Listed |

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

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

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

| Chemical name | Hazardous Substances RQs | Extremely Hazardous Substances RQs |
|---------------|--------------------------|------------------------------------|
| 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 |
|---------------|------------|---------------|--------------|
| glycerol | Listed | Listed | Listed |
| sodium azide | Listed | Listed | Listed |

| |
|--------------------------------------|
| SECTION 16. Other information |
|--------------------------------------|

Issuing Date: 2018-12-10

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