



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

Issuing Date: 2018-08-08

Version: 1

SECTION 1. Identification

Product identifier

Product No 43481
Product name FoxP3/Transcription Factor Fixation/Permeabilization Kit
Kit Component 44931: FoxP3/Transcription Factor Fixation/Permeabilization Concentrate (4X)
58766: FoxP3/Transcription Factor Fixation/Permeabilization Diluent (1X)
68751: Flow Cytometry Perm Buffer (10X)

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.
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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)

| | |
|---|-------------|
| Acute oral toxicity | Category 4 |
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2 |
| Skin sensitization | Category 1 |
| Germ cell mutagenicity | Category 2 |
| Carcinogenicity | Category 1A |
| Specific target organ toxicity - single exposure (STOT SE) | Category 3 |

GHS Label elements, including precautionary statements

**Signal Word**

Danger.

Hazard statement(s)

Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing genetic defects. May cause cancer. May cause respiratory irritation.

Precautionary Statement(s)

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

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

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

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

Supplementary Hazard Information

No information available.

Hazards not otherwise classified (HNOC)

Not applicable.

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown acute toxicity

SECTION 3. Composition/information on ingredients

Kit Component 44931: FoxP3/Transcription Factor Fixation/Permeabilization Concentrate (4X)

| Chemical Name | CAS No | Weight % |
|---------------|---------|----------|
| Formaldehyde | 50-00-0 | <10 |

Kit Component 58766: FoxP3/Transcription Factor Fixation/Permeabilization Diluent (1X)

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

Kit Component 68751: Flow Cytometry Perm Buffer (10X)

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

SECTION 4. First-aid measures

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Consult a physician.

| | |
|-------------------|---|
| Inhalation | IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician. |
| Ingestion | Rinse mouth. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. |

Most important symptoms and effects, both acute and delayed

Irritating to eyes and skin. Respiratory irritation.

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 | Water spray. Dry chemical. Alcohol-resistant foam. Carbon dioxide (CO ₂). |
| Unsuitable Extinguishing Media | None. |

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. Avoid breathing vapors or mists. Ensure adequate ventilation. |
| Other information | No information available. |

Environmental precautions

Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained.

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. Clean contaminated surface thoroughly. Pick up and transfer to properly labeled containers. |

SECTION 7. Handling and storage

Precautions for safe handling

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, Strong bases, Metals. |

SECTION 8. Exposure controls/personal protection**Control parameters**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH REL |
|---------------|--|-------------------------------|--|
| Formaldehyde | Ceiling: 0.3 ppm | TWA : 0.75 ppm STEL: 2 ppm | IDLH : 20 ppm TWA : 0.016 ppm Ceiling: 0.1 ppm |
| 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 | Safety glasses with side-shields. |
| Skin and body protection | Wear protective gloves/clothing. |
| Respiratory protection | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved 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. |
| Hygiene measures | 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 | 44931: FoxP3/Transcription Factor Fixation/Permeabilization Concentrate (4X) |
| Physical state | Liquid |
| Appearance | Clear |
| Color | Colorless |
| pH VALUE | 3.6 |
| Kit Component | 58766: FoxP3/Transcription Factor Fixation/Permeabilization Diluent (1X) |
| Physical state | Liquid |
| Appearance | Clear |
| Color | Colorless |
| pH VALUE | 6.5 |

| | |
|----------------------|--|
| Kit Component | 68751: Flow Cytometry Perm Buffer (10X) |
| Physical state | Liquid |
| Appearance | Clear |
| Color | Yellow |
| pH VALUE | 7.0 |

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

Protect from light. 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. Strong bases. Metals.

Hazardous Decomposition Products

None known based on information supplied.

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 | 44931: FoxP3/Transcription Factor Fixation/Permeabilization Concentrate (4X) |
| Inhalation | Harmful by inhalation May cause irritation of respiratory tract |

Eye contact

| | |
|----------------------|---|
| Kit Component | 44931: FoxP3/Transcription Factor Fixation/Permeabilization Concentrate (4X) |
| Eye contact | Irritating to eyes |

Skin contact

| | |
|----------------------|---|
| Kit Component | 44931: FoxP3/Transcription Factor Fixation/Permeabilization Concentrate (4X) |
| Skin contact | May be absorbed through the skin in harmful amounts Irritating to skin |

Ingestion

Kit Component 44931: FoxP3/Transcription Factor Fixation/Permeabilization Concentrate (4X)
Ingestion Harmful if swallowed

Information on toxicological effects**Component Information**

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------|-------------------|--|--------------------------|
| Formaldehyde | = 100 mg/kg (Rat) | = 270 mg/kg (Rabbit) | = 0.578 mg/L (Rat) 4 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 Irritating to eyes and skin, Respiratory irritation.

Skin and Eye Corrosion/Irritation

Kit Component 44931: FoxP3/Transcription Factor Fixation/Permeabilization Concentrate (4X)
Skin corrosion/irritation Irritating to skin
Serious eye damage/eye irritation Irritating to eyes

Sensitization

Kit Component 44931: FoxP3/Transcription Factor Fixation/Permeabilization Concentrate (4X)
Skin Sensitization May cause skin sensitization

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.

| Chemical Name | IARC | NTP | OSHA |
|-------------------------|------|-------|------|
| Formaldehyde 50-00-0 | 1 | Known | X |

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 |
|---------------|-------------------|---|---|
| Formaldehyde | - | LC50 22.6 - 25.7 mg/L (Pimephales promelas) 96 h LC50 1510 µg/L (Lepomis macrochirus) 96 h LC50 | EC50 11.3 - 18 mg/L (Daphnia magna) 48 h LC50 2 mg/L (Daphnia magna) 48 h |

| | | | |
|--------------|---|---|---|
| | | 23.2 - 29.7 mg/L (Pimephales promelas) 96 h LC50 0.032 - 0.226 mL/L (Oncorhynchus mykiss) 96 h LC50 100 - 136 mg/L (Oncorhynchus mykiss) 96 h LC50 41 mg/L (Brachydanio rerio) 96 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 No information available

| Chemical Name | Octanol-Water Partition Coefficient |
|---------------|-------------------------------------|
| Formaldehyde | 0.35 |

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

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

| Chemical Name | TSCA 8(b) | TSCA 12(b) | DSL | NDSL |
|---------------|-----------|------------|--------|------------|
| Formaldehyde | Listed | Not Listed | Listed | Not Listed |
| sodium azide | Listed | Not Listed | 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 % |
|---------------|------------|-------------------------------|
| Formaldehyde | 50-00-0 | 0.1 |
| 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

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) |
|---------------|-----------------------------|------------------------|---------------------------|----------------------------|---|
| Formaldehyde | 100 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 |
|---------------|--------------------------|------------------------------------|
| Formaldehyde | 100 lb | 100 lb |
| sodium azide | 1000 lb | 1000 lb |

California Proposition 65

Refer to kit component SDS for full California Proposition 65 information.

| Chemical Name | California Prop. 65 |
|---------------|---------------------|
| Formaldehyde | Carcinogen |

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 |
|---------------|------------|---------------|--------------|
| Formaldehyde | Listed | Listed | Listed |
| sodium azide | Listed | Listed | Listed |

SECTION 16. Other information

Issuing Date: 2018-08-08

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