

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

Issuing Date: 2018-04-09

Revision Date: 2025-07-30

Version: 2

SECTION 1. Identification

Product identifier

Product No 9944
Product name AICAR

Recommended use of the chemical and restrictions on use

Identified uses For Research Use Only. Not for Use in Diagnostic Procedures.

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 considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|------------|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2 |
| Specific target organ toxicity - single exposure (STOT SE) | Category 3 |

GHS Label elements, including precautionary statements



Signal Word
Warning

Hazard statement(s)
Causes skin irritation

Causes serious eye irritation
May cause respiratory irritation

Precautionary Statement(s)

Avoid breathing dust/fume/gas/mist/vapors/spray.
Wash face, hands and any exposed skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN: Wash with plenty of soap and water
If skin irritation 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
Call a POISON CENTER or doctor/physician if you feel unwell
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container to an approved waste disposal plant.

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

Not applicable.

Unknown Acute Toxicity 100% of the mixture consists of ingredient(s) of unknown acute toxicity

SECTION 3. Composition/information on ingredients

Molecular Weight 258.23

| Chemical name | CAS No. | Weight-% |
|---|-----------|----------|
| 5-Amino-1-beta-D-ribofuranosyl-1H-imidazole-4-carboxamide | 2627-69-2 | 100 |

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. If symptoms persist, call a physician.
Skin contact Wash off immediately with plenty of water. Remove and wash contaminated clothing before re-use. If skin irritation persists, call a physician.
Inhalation Move to fresh air. Get medical attention immediately if symptoms occur.
Ingestion Clean mouth with water and afterwards drink plenty of water.

Most important symptoms and effects, both acute and delayed

No information available.

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. Carbon dioxide (CO₂). Dry chemical. Foam.

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 Ensure adequate ventilation.

Other information No information available.

Environmental precautions

See Section 12 for additional information.

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.

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 Acids, Bases

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.

Appropriate engineering controls

Showers, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------|--|
| 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. |

SECTION 9. Physical and chemical properties

Information on basic physical and chemical properties

| | |
|-----------------------|--------------------------|
| Physical state | Solid |
| Appearance | Powder |
| Color | White |
| Odor | No information available |
| Odor Threshold | No information available |

| Property | Values | Remarks • Method |
|---|---------------------------|-------------------------|
| pH | No information available | |
| Melting point/freezing point | 210 - 220°C | |
| Boiling point or initial boiling point and boiling range | No information available | |
| Flash point | No information available | |
| Evaporation rate | No information available | |
| Flammability | No information available | |
| Lower explosion limit | No information available | |
| Upper explosion limit | No information available | |
| Vapor pressure | No information available | |
| Relative vapor density | No information available | |
| Specific gravity | No information available | |
| Solubility | No information available. | |
| Solubility in other solvents | No information available. | |
| Partition coefficient: n-octanol/water | No information available | |
| Autoignition temperature | No information available | |
| Hyphen | No information available | |
| Viscosity | No information available | |
| Viscosity, dynamic | No information available | |

| | |
|--------------------------|--------------------------|
| Other information | |
| Softening point | No information available |
| Molecular Weight | 258.23 |
| VOC content | No information available |
| Liquid Density | No information available |
| Bulk density | No information available |

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

Exposure to light. Heat.

Incompatible materials

Acids, Bases

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

| | |
|---------------------|--|
| Inhalation | May cause irritation of respiratory tract. |
| Eye contact | May cause irritation. |
| Skin contact | May cause irritation. May be absorbed through the skin in harmful amounts. |
| Ingestion | May be harmful if swallowed. |

Symptoms related to the physical, chemical and toxicological characteristics

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.

| | |
|-------------------------------|--|
| Unknown Acute Toxicity | 100% of the mixture consists of ingredient(s) of unknown acute toxicity. |
|-------------------------------|--|

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

| | |
|---------------------------------|--|
| Symptoms | 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. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Neurological effects | No information available. |
| Aspiration Hazard | No information available. |

SECTION 12. Ecological information

Ecotoxicity

100% of the mixture consists of components of unknown hazards to the aquatic environment.

| | |
|--------------------------------------|--------------------------|
| Persistence and degradability | No information available |
| Mobility | No information available |

Bioaccumulation

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. Dispose of wastes in an approved waste disposal facility.

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**

This product contains a chemical or chemicals included in the Toxic Substances Control Act (TSCA) Chemical Substance Inventory, Domestic Substances List (DSL) and/or Non-Domestic Substances List (NDSL):

| Chemical name | TSCA 8(b) | TSCA 12(b) | DSL | NDSL |
|---|-----------|------------|------------|--------|
| 5-Amino-1-beta-D-ribofuranosyl-1H-imidazole-4-carboxamide | Listed | Not Listed | Not Listed | Listed |

Canadian Workplace Hazardous Materials Information System (WHMIS) Classification

This product does not meet the criteria for classification under the Hazardous Products Act.

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.

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

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. FIFRA Label Information

This product does not contain any substances regulated as pesticides.

US Commerce Department - Export Administration Regulations Information

This product does not contain any substances regulated under the Chemical Weapons Convention (CWC).

U.S. Drug Enforcement Administration Information

This product does not contain any substances regulated under the DEA.

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

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Disclaimer

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

End of Safety Data Sheet