

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

Issuing Date: 2014-03-13

Revision Date: 2024-12-10

Version: 4

SECTION 1. Identification

Product identifier

Product No 12819
Product name Tunicamycin
UN number UN3462

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)

Acute oral toxicity	Category 2
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GHS Label elements, including precautionary statements



Signal Word
 Danger

Hazard statement(s)

Fatal if swallowed.

Precautionary Statement(s)

Wash face, hands and any exposed skin thoroughly after handling.

Do not eat, drink or smoke when using this product.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Rinse mouth

Store locked up.

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

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

Not applicable.

SECTION 3. Composition/information on ingredients

Formula $C_{39}H_{60}N_4O_{16}$
Molecular Weight 840.9 g/mol

Chemical name	CAS No	Weight-%
Tunicamycin	11089-65-9	100

SECTION 4. First-aid measures

Eye contact Rinse thoroughly with plenty of water, also under the eyelids.
Skin contact Wash skin with soap and water.
Inhalation Move to fresh air.
Ingestion Do NOT induce vomiting. Call a physician immediately. Clean mouth with water and afterwards drink plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

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 Use personal protective equipment Avoid contact with skin, eyes and clothing

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

No information available.

Explosion Data**Sensitivity to Mechanical Impact** None**Sensitivity to Static Discharge** None**Protective Equipment and Precautions for Firefighters**

Wear self-contained breathing apparatus and protective suit.

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures**For non-emergency personnel** Use personal protective equipment. Keep people away from and upwind of spill/leak.**Other information** No information available.**Environmental precautions**

Do not flush into surface water or sanitary sewer system.

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** Use personal protective equipment. Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Clean contaminated surface thoroughly.

SECTION 7. Handling and storage

Precautions for safe handling

Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities**Technical measures/Storage conditions** Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.**Packaging material** No information available**Incompatible products** None known based on information supplied

SECTION 8. Exposure controls/personal protection

Control parameters**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**Skin and body protection** Wear protective gloves/clothing.

**Respiratory protection
Hygiene measures**

In case of inadequate ventilation wear respiratory protection.
Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feeding stuffs. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

SECTION 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Solid
Appearance	Powder
Color	Off-white
Odor	No information available
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH	No information available		
Melting point/freezing point	234-235 °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		
Density and/or relative density	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		
Decomposition temperature	No information available		
Viscosity	No information available		
Viscosity, dynamic	No information available		

Other information

Softening point	No information available
Molecular Weight	840.9 g/mol
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

No information available

Incompatible Materials

None known based on information supplied

Hazardous Decomposition Products

None known based on information supplied

SECTION 11. Toxicological information

Information on likely routes of exposure

Inhalation	There is no data available for this product.
Eye contact	There is no data available for this product.
Skin contact	There is no data available for this product.
Ingestion	May be fatal if swallowed.

Information on toxicological effects

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.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Tunicamycin	6.25 mg/kg (Rat)	-	-

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

Symptoms	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
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	May damage fertility or the unborn child. Based on available data, the classification criteria are not met.
Developmental toxicity	May cause birth defects. Based on available data, the classification criteria are not met.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Chronic Toxicity	Prolonged or repeated exposure increases the risk. Possible risks of irreversible effects.
Neurological effects	No information available.
Aspiration Hazard	No information available.

SECTION 12. Ecological information

Ecotoxicity

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**

Should not be released into the environment.

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	UN3462
UN proper shipping name	Toxins, extracted from living sources, solid, n.o.s. (Tunicamycin)
Transport hazard class(es)	6.1
Packing group	II

IATA

UN number	UN3462
UN proper shipping name	Toxins, extracted from living sources, solid, n.o.s. (Tunicamycin)
Transport hazard class(es)	6.1
Packing group	II

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

All components of this product are NOT included on the Toxic Substance Control Act (TSCA) Inventory, DSL, or NDSL All components of this product are NOT included on DSL or NDSL

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	Yes
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.

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