

Safety Data Sheet (SDS) According to the REACH Regulation (EC) No. 1907/2006

Issuing Date: 2014-03-13

Revision Date: 2024-12-10

Version: 3

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product No 12819
Product name Tunicamycin

Contains

Chemical name Tunicamycin (90 - 100%)	Index No. -	CAS No 11089-65-9
Formula Molecular Weight	C₃₉H₆₀N₄O₁₆ 840.9 g/mol	

1.2. Relevant identified uses of the substance or mixture and uses advised against

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

1.3. Details of the supplier of the safety data sheet

Importer Cell Signaling Technology Europe B.V. Dellaertweg 9b 2316 WZ Leiden The Netherlands TEL: +31 (0)71 7200 200 FAX: +31 (0)71 891 0019	Manufacturer Cell Signaling Technology, Inc. 3 Trask Lane Danvers, MA 01923 United States TEL: +1 978 867 2300 FAX: +1 978 867 2400
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Website www.cellsignal.com
E-mail Address info@cellsignal.eu

1.4. Emergency telephone number

CHEMTREC 24 hours a day, 7 days a week, 365 days a year
 +1 703 527 3887 (INTERNATIONAL) +1 800 424 9300 (NORTH AMERICA)

Europe 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Acute oral toxicity	Category 2 - (H300)
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2.2. Label elements



Signal word
Danger

Hazard statement(s)
H300 - Fatal if swallowed.

Precautionary statement(s)
 P264 - Wash face, hands and any exposed skin thoroughly after handling.
 P270 - Do not eat, drink or smoke when using this product.
 P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P330 - Rinse mouth.
 P405 - Store locked up.
 P501 - Dispose of contents/container to an approved waste disposal plant.

2.3. Other hazards

No information available.

For the full text of the H-phrases & EUH-phrases mentioned in this Section, see Section 16

SECTION 3: Composition/information on ingredients

3.1 Substances

Formula C39H60N4O16

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
Tunicamycin	11089-65-9	100	-	Acute Tox. 2 (H300)	no data available

For the full text of the R-phrases mentioned in this Section, see Section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Use first aid treatment according to the nature of the injury. When symptoms persist or in all cases of doubt seek medical advice.
Inhalation	Move to fresh air.
Skin contact	Wash skin with soap and water.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids.
Ingestion	Do NOT induce vomiting. Call a physician immediately. Clean mouth with water and afterwards drink plenty of water.
Protection of first-aiders	Use personal protective equipment. Avoid contact with skin, eyes and clothing.

4.2. Most important symptoms and effects, both acute and delayed

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

4.3. Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Unsuitable Extinguishing Media No information available

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Use personal protective equipment. Keep people away from and upwind of spill/leak.
For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. 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.

6.4. Reference to other sections

See Sections 8 & 13 for additional information.

SECTION 7: Handling and storage

7.1. 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.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

7.3. Specific end use(s)

Use as a laboratory reagent.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The product does not contain any hazardous materials with occupational exposure limits established.

8.2. Exposure controls

Appropriate engineering controls

Showers, eyewash stations, and ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection	Tightly fitting safety goggles.
Skin protection	Wear protective gloves and protective clothing.
Hand protection	Impervious gloves.
Other	Wear suitable protective clothing.
Respiratory protection	In case of inadequate ventilation wear respiratory protection.

Environmental Exposure Controls

No information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	No information available
Melting point/freezing point	234-235 °C	
Boiling point or initial boiling point and boiling range	No information available	No information available
Flash point	No information available	No information available.
Evaporation rate	No information available	No information available
Flammability	No information available	No information available
Upper/lower flammability or explosive limits	/	No information available
Vapor pressure	No information available	No information available
Relative vapor density	No information available	No information available
Density and/or relative density	No information available	No information available
Solubility	No information available.	No information available
Partition coefficient: n-octanol/water	No information available	No information available
Autoignition temperature	No information available	No information available
Decomposition temperature	No information available	No information available.
Viscosity	No information available	No information available
Explosive properties	No information available	No information available
Oxidizing properties	No information available	No information available

9.2. Other information

Softening point	No information available
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Molecular Weight	840.9 g/mol
Solubility in other solvents	No information available
VOC content	No information available
Liquid Density	No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization	Hazardous polymerization does not occur.
Hazardous reactions	None under normal processing

10.4. Conditions to avoid

None known based on information supplied.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

None under normal use conditions

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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)	-	-

Unknown Acute Toxicity No information available.

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.

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

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.

Sensitization	No information available.
Mutagenic effects	No information available.
Carcinogenicity	No information available.
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.
Aspiration Hazard	No information available.

11.2. Information on other hazards

No information available.

SECTION 12: Ecological information

12.1. Toxicity

Unknown Aquatic Toxicity	100% of the mixture consists of components of unknown hazards to the aquatic environment.
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12.2. Persistence and degradability

No information available

12.3. Bioaccumulative potential

Bioaccumulation	No information available.
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Bioconcentration factor (BCF)	No information available.
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12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Endocrine disrupting properties

This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.

Other information

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

This material is subject to regulation as a hazardous material for shipping:

IMDG/IMO

14.1 UN number	UN3462
14.2 UN proper shipping name	Toxins, extracted from living sources, solid, n.o.s. (Tunicamycin)
14.3 Transport hazard class(es)	6.1
14.4 Packing group	II
14.5 Environmental hazards	None
14.6 Special precautions for user	None
14.7 Maritime transport in bulk according to IMO instruments	Not regulated

ADR/RID

14.1 UN number	UN3462
14.2 UN proper shipping name	Toxins, extracted from living sources, solid, n.o.s. (Tunicamycin)
14.3 Transport hazard class(es)	6.1
14.4 Packing group	II
14.5 Environmental hazards	None
14.6 Special precautions for user	None

IATA

14.1 UN number	UN3462
14.2 UN proper shipping name	Toxins, extracted from living sources, solid, n.o.s. (Tunicamycin)
14.3 Transport hazard class(es)	6.1
14.4 Packing group	II
14.5 Environmental hazards	None
14.6 Special precautions for user	None

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)**

This product does not contain Substances of Very High Concern (SVHC).

SEVESO Directive Information

This product does not contain substances identified in the SEVESO Directive.

International inventories

TSCA 8(b)	-
DSL/NDSL	-
EINECS/ELINCS	-
ENCS	-
IECSC	Complies
KECL	-
PICCS	-
AICS	-

International inventories legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out

SECTION 16: Other information

Full text of H-Statements referred to under Sections 2 and 3

H300 - Fatal if swallowed

Classification procedure:	Expert judgment and weight of evidence determination.
Issuing Date:	2014-03-13
Revision Date:	2024-12-10

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.