

Safety Data Sheet

Section 1: Product & Company Identification

Product Name:	Tunicamycin
Product #:	T-1016
Synonyms:	-
Supplier:	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego, CA 92131 Tele# + 858-452-9925
Emergency Tele#:	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

Section 2: Composition / Information on Ingredients

Component	CAS #	EC #	% Composition
Tunicamycin	11089-69-5	-	

Section 3: Hazards Identification

Symbols	
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Section 4: First Aid Measures

General Overview:	Show this material safety data sheet to the doctor in attendance.
Inhalation:	After inhalation: fresh air
Skin:	In case of skin contact: Take off all contaminated clothing immediately. Rinse skin with water/shower.
Eyes:	After eye contact: Rinse out with plenty of water. Remove contact lenses.
Ingestion:	If swallowed, give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are awake and fully

	conscious), administer activated charcoal (20-40 g in a 10% slurry) and consult a doctor as quickly as possible.
	See section 11 for more detailed information on health effects & symptoms.

SECTION 5: Fire Fighting Measures

Flammability of the product:	Combustible
Extinguishing Media:	Water, foam, carbon dioxide, dry powder
Hazardous thermal (de)composition products:	Nature of decomposition products is not known. Development of hazardous combustion gases or vapors possible in the event of fire.
Special Fire Fighting Procedures:	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. Prevent fire extinguishing water from contaminating surface water or the ground water system.
Flash Point:	No data available





Section 6: Accidental Release Measures

Personal Precautions:	Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see Section 8.
Environmental Precautions:	Do not let product enter drains.
Methods for Clean-up:	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see Sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

SECTION 7: Handling & Storage

Storage:	Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons. Recommended storage temperature: -20°C. Light sensitive. Moisture sensitive.
Handling:	General industrial hygiene practices.

SECTION 8: Exposure controls / Personal Protection

<p>Respiratory Protection:</p>	 <p>Recommended Filter type: Filter type P3. The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. required when dusts are generated.</p> <p>Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.</p>
<p>Skin and Body:</p>	  <p>Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.</p> <p>Protective clothing.</p>
<p>Eyes:</p>	 <p>Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses.</p>

Ventilation/Engineering Measures:	Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance. Do not let product enter drains.
Hygiene:	Handle in accordance with good industrial hygiene and safety practice.
Other:	Contains no substances with occupational exposure limit values.

SECTION 9: Physical and Chemical Properties

Appearance & Odor:	White solid
Formula	C ₃₉ H ₆₄ N ₄ O ₁₆
Molecular Wt.	840.0
Melting Pt.	234 - 235°C
Boiling Pt.	No data available
Density:	No data available
Vapor Pressure:	No data available
Evaporation Rate:	No data available
Vapor Density:	No data available
Solubility:	DMSO, Ethanol
Flash Point:	No data available
Autoignition Temp:	No data available

SECTION 10: Stability and Reactivity

Stability:	<p>The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.</p> <p>The product is chemically stable under standard ambient conditions (room temperature).</p>
Hazardous decomposition products:	No data available
Materials to Avoid:	Strong oxidizing agents
Conditions to avoid:	No data available

SECTION 11: Toxicological Information

RTECS#:	YO7980200
	Exposure may affect cell growth rate and morphology., Neurotoxic effects. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

	Stomach - irregularities - Based on human evidence.
ACUTE Toxicity:	LD50 Oral = 1 mg/kg (Pig)
CHRONIC Toxicity:	N/A
Chronic Exposure: Carcinogen: Mutagen: Teratogen: Reproductive:	<p>IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.</p> <p>AGGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by ACGIH.</p> <p>NTP: No component of this product present at levels greater than or equal to 0.1% is identified as known or anticipated human carcinogen by NTP.</p> <p>OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as known or potential human carcinogen by OSHA.</p> <p>EPA: No classification on carcinogenic data is available from EPA</p>

SECTION 12: Ecological Information

Ecotoxicity:	No data available
Mobility:	No data available
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Other adverse effects:	No data available
Corrosivity Characteristic:	No data available
General Notes:	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

SECTION 13: Disposal Considerations

Residue Waste or Unused product:	Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste.
Contaminated Packaging:	Handle uncleaned containers like the product itself.

SECTION 14: Transportation Information

UN ID#:	3462
ADR / RID (LAND):	N/A
DOT regulations:	UN#: 3462

	Class 6.1 Packing Group: II Proper Shipping Name: Toxins, extracted from living sources, solid, n.o.s. (tunicamycin) Poison Inhalation Hazard: No
IMDG/IMO (SEA):	UN#: 3462 Class 6.1 Packing Group: II EMS-No: F-A, S-A Proper Shipping Name: TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S. (tunicamycin)
IATA/DGR (AIR):	UN#: 3462 Class 6.1 Packing Group: II Proper Shipping Name: Toxins, extracted from living sources, solid, n.o.s. (tunicamycin)
Special Provisions:	N/A

SECTION 15: Regulatory Information

Health Phrases:	Danger! H300 Fatal if swallowed.
Risk Phrases:	P264 Wash skin thoroughly after handling. P270 Do not eat, drink, or smoke when using this product.
Safety Phrases:	P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth. P405 Store locked up. P501 Dispose of contents/ container to an approved waste disposal plant.
EU Regulations:	N/A
US Regulations:	TSCA: Not listed California Proposition 65: No products were found Pennsylvania State Right to Know: Listed New Jersey State Right to Know: Listed
U.S. Federal Regulations:	SARA 302/304 emergency planning and notification: No products were found. SARA 311/312 MSDS distribution-chemical inventory-hazard identification: Acute Health Hazard, Chronic Health Hazard SARA 313 toxic chemicals notification and release reporting: No products were found. Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found. Clean Air Act (CAA) 112 accidental release prevention: No products were found.



	Clean Air Act (CAA) 112 regulated flammable substances: No products were found. Clean Air Act (CAA) 112 regulated toxic substances: No products were found. OSHA: Acute toxicity - oral (Cat. 1)
WHMIS (Canada):	N/A

SECTION 16: Other Information

LIABILITY STATEMENT: *The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. AG Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. AG Scientific products are for research purposes only. Not for human use or consumption.*