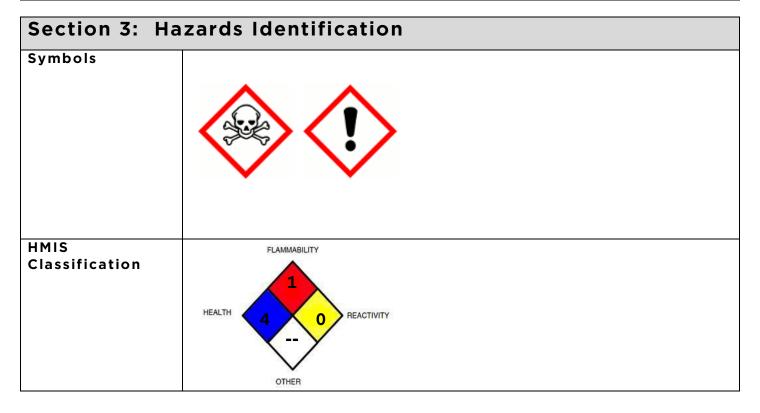


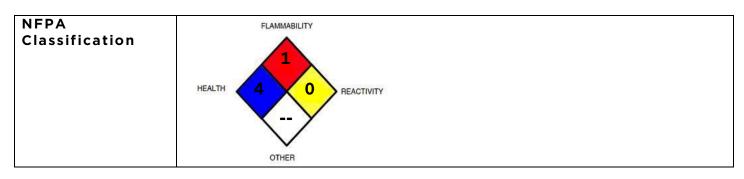
Safety Data Sheet

| Section 1: Product & Company Identification | | |
|---|---|--|
| Product Name: | Concanamycin A | |
| Product #: | C-1057 | |
| Synonyms: | Folimycin; TAN 1323B | |
| 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 |
| Concanamycin A | 80890-47-7 | - | >98 |







| Section 4: | First Aid Measures |
|----------------------|---|
| General Overview: | Immediate medical attention is required. If symptoms persist, call a physician. |
| Inhalation: | Immediate medical attention is required Remove to fresh air If not breathing, give artificial respiration Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation Artificial respiration and/or oxygen may be necessary Call a physician Move to fresh air in case of accidental inhalation of vapors If symptoms persist, call a physician. |
| Skin: | Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician. |
| Eyes: | Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician immediately. If symptoms persist, call a physician. |
| Ingestion: | Do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Drink plenty of water. Clean mouth with water and drink afterwards plenty of water. Call a physician. |
| | See section 11 for more detailed information on health effects & symptoms. |

| SECTION 5: | Fire Fighting Measures |
|--|---|
| Flammability of the product: | No data available |
| Extinguishing Media: | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Hazardous thermal (de)composition products: | Carbon oxides, Nitrogen oxides |
| Special Fire Fighting Procedures: | Wear self-contained breathing apparatus and protective suit. |



| Flash Point: | 538.25°C |
|--------------|----------|

| Section 6: A | ccidental Release Measures |
|----------------------------|---|
| Personal Precautions: | Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. |
| Environmental Precautions: | Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information. |
| Methods for Clean-up: | Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal. Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges. |

| SECTION 7: | Handling & Storage |
|------------|--|
| Storage: | Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Protect from moisture. Store at -20 °C. |
| Handling: | Avoid contact with skin, eyes, or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink, or smoke when using this product. Use with local exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Corrosive hazard. Wear protective gloves/clothing and eye/face protection. |

SECTION 8: Exposure controls / Personal Protection

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. |
|-----------------------------------|---|
| Skin and Body: | Wear protective gloves and protective clothing. |
| Eyes: | Tight sealing safety goggles. Face protection shield. |
| Ventilation/Engineering Measures: | Showers, Eyewash stations, Ventilation systems |
| Hygiene: | Handle in accordance with good industrial hygiene and safety practice. |
| Other: | This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies. |

| SECTION 9: Physical and Chemical Properties | | |
|---|--|--|
| Appearance & Odor: | White solid | |
| Formula | C ₄₆ H ₇₅ NO ₁₄ | |
| Molecular Wt. | 866.1 | |
| Melting Pt. | No data available | |
| Boiling Pt. | 966.39°C | |
| Liquid Density: | 1.20 g/cm ³ | |
| Vapor Pressure: | No data available | |
| Evaporation Rate: | No data available | |
| Vapor Density: | 1 | |
| Solubility: | DMSO | |
| Flash Point: | 538.25°C | |
| Autoignition Temp: | No data available | |



| SECTION 10: Stability and Reactivity | | |
|--------------------------------------|---|--|
| Stability: | Stable under recommended storage conditions. | |
| Hazardous decomposition products: | Carbon oxides, Nitrogen oxides | |
| Materials to Avoid: | Strong oxidizing agents | |
| Conditions to avoid: | Exposure to air or moisture over prolonged periods. | |

| SECTION 11: Toxicological Information | | |
|---|--|--|
| RTECS#: | N/A | |
| ACUTE Toxicity: | N/A | |
| CHRONIC Toxicity: | Prolonged or repeated exposure increases the risk. Possible risk of irreversible effects. Avoid repeated exposure. | |
| Chronic Exposure: Carcinogen: Mutagen: Teratogen: Reproductive: | 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. 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. 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. 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. EPA: No classification on carcinogenic data is available from EPA | |

| SECTION 12: Ecological Information | | |
|------------------------------------|--|--|
| Ecotoxicity: | May cause long lasting harmful effects to aquatic life. | |
| 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: | Disposal should be in accordance with applicable regional, national, and local laws and regulations. | |
| Contaminated Packaging: | Do not reuse container. | |

| SECTION 14: Transportation Information | | |
|--|--|--|
| UN ID#: | UN3462 | |
| ADR / RID (LAND): | N/A | |
| DOT regulations: | UN/ID no UN3462 | |
| | Hazard Class 6.1 | |
| | Packing Group II | |
| | Proper shipping name Toxins, extracted from living sources, solid, n.o.s. | |
| | Description UN3462, Toxins, extracted from living sources, solid, n.o.s., | |
| | 6.1, II | |
| | Emergency Response Guide Number 153 | |
| IMDG/IMO (SEA): | UN/ID no UN3462 | |
| | Hazard Class 6.1 | |
| | Packing Group II | |
| | Proper shipping name Toxins, extracted from living sources, solid, n.o.s. | |
| | Description UN3462, Toxins, extracted from living sources, solid, n.o.s. | |
| | (Concanamycin A), 6.1, II | |
| | Special Provisions 210, 274 | |
| | EmS-No F-A, S-A | |
| IATA/DGR (AIR): | UN/ID no UN3462 | |
| | Hazard Class 6.1 | |
| | Packing Group II | |
| | Proper shipping name Toxins, extracted from living sources, solid, n.o.s. Description UN3462, Toxins, extracted from living sources, solid, n.o.s. | |
| | (Concanamycin A), 6.1, II | |
| | ' | |
| Special Provisions: | | |
| Special Provisions: | ERG Code 6L N/A | |

| SECTION 15: | Regulatory Information |
|-----------------|---|
| Health Phrases: | H319 Causes serious eye irritation |
| | H310 Fatal in contact with skin |
| | H330 Fatal if inhaled |
| | H300 Fatal if swallowed |
| Risk Phrases: | P264 Wash face, hands, and any exposed skin thoroughly after handling |
| | P270 Do not eat, drink, or smoke when using this product |
| | P262 Do not get in eyes, on skin, or on clothing |
| | P280 Wear protective gloves/protective clothing/eye protection/face |
| | protection |
| | P260 Do not breathe dust/fume/gas/mist/vapors/spray |



| | P271 Use only outdoors or in a well-ventilated area |
|-----------------|---|
| | |
| Safety Phrases: | P284 Wear respiratory protection P308+P313 IF exposed or concerned: Get medical advice/attention P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/attention P302 + P350 + P310 IF ON SKIN: Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/physician P361 Remove/Take off immediately all contaminated clothing P363 Wash contaminated clothing before reuse P304 + P340 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON |
| | CENTER or doctor/physician P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth. |
| EU Regulations: | N/A |
| US Regulations: | TSCA: Not listed |
| _ | California Proposition 65: No products were found |
| U.S. Federal | SARA 302/304 emergency planning and notification: No products were |
| Regulations: | 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. 2); Acute toxicity - dermal (Cat. 2); |
| | Acute toxicity - inhalation (dusts/mists) (Cat. 1); Serious eye |
| | damage/eye irritation (Cat. 2A) |
| 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.