

Safety Data Sheet

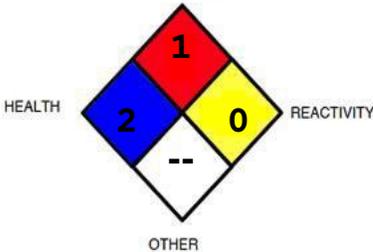
Section 1: Product & Company Identification

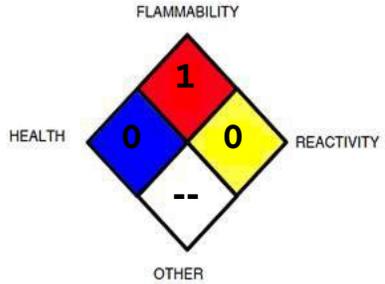
Product Name:	Milbemycin A3
Product #:	M-2585
Synonyms:	Milbemycin alpha1; Milbemectin; Milbemectin A3; B 41A3
Supplier:	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego CA 92131 Tele# + 858-452-9925
Emergency Tele#:	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

Section 2: Composition / Information on Ingredients

Component	CAS#	EC #	% Composition
Milbemycin A3	51596-10-2	-	>98

Section 3: Hazards Identification

Symbols	
HMIS Classification	<p style="text-align: center;">FLAMMABILITY</p>  <p style="text-align: center;">OTHER</p>

NFPA Classification	
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Section 4: First Aid Measures

General Overview:	If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.
Inhalation:	Remove to fresh air Call a physician If breathing is irregular or stopped, administer artificial respiration Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.
Skin:	Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
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. If symptoms persist, call a physician.
Ingestion:	Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting.
	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:	No data available
Special Fire Fighting Procedures:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Flash Point:	233.16°C

Section 6: Accidental Release Measures

Personal Precautions:	Use personal protective equipment as required.
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Environmental Precautions:	Prevent entry into waterways, sewers, basements, or confined areas. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information. Prevent product from entering drains. Should not be released into the environment.
Methods for Clean-up:	Prevent further leakage or spillage if safe to do so. 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.

SECTION 7: Handling & Storage

Storage:	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Store at -20°C.
Handling:	Use personal protective equipment as required. Avoid contact with skin, eyes, or clothing. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink, or smoke when using this product.

SECTION 8: Exposure controls / Personal Protection

Respiratory Protection:	 <p>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.</p>
Skin and Body:	  <p>Wear protective gloves and protective clothing.</p>

Eyes:	 <p>Tight sealing safety goggles.</p>
Ventilation/Engineering Measures:	Ensure proper ventilation.
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	$C_{31}H_{44}O_7$
Molecular Wt.	528.7
Melting Pt.	212°C
Boiling Pt.	725.52°C
Density:	1.21 g/cm ³
Vapor Pressure:	0 mmHg
Evaporation Rate:	No data available
Vapor Density:	1
Solubility:	Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.
Flash Point:	233.16°C
Autoignition Temp:	No data available

SECTION 10: Stability and Reactivity

Stability:	Stable under recommended storage conditions.
Hazardous decomposition products:	Carbon oxides
Materials to Avoid:	Strong oxidizing agents
Conditions to avoid:	Extremes of temperature and direct sunlight.

SECTION 11: Toxicological Information

RTECS#:	N/A
ACUTE Toxicity:	No data available
CHRONIC Toxicity:	Probably carcinogenic to humans.
Chronic Exposure: Carcinogen: Mutagen: Teratogen: Reproductive:	IARC: Milbemycin A3 (CAS 51596-10-2) Group 2A 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: Milbemycin A3 (CAS 51596-10-2) 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:	No data available

SECTION 13: Disposal Considerations

Residue Waste or Unused product:	Disposal should be in accordance with applicable regional, national, and local laws and regulations. Should not be released into the environment.
Contaminated Packaging:	Do not reuse container. Waste codes should be assigned by the user based on the application for which the product was used. This product contains one or more substances that are listed with the State of California as a hazardous waste.

SECTION 14: Transportation Information

UN ID#:	UN2588
ADR / RID (LAND):	Not regulated
DOT regulations:	UN/ID no UN2588 Hazard Class 6.1 Packing Group III

	<p>Proper shipping name Pesticides, solid, toxic, n.o.s. Description UN2588, Pesticides, solid, toxic, n.o.s. (Milbemycin A3), 6.1, III Emergency Response Guide Number 151</p>
IMDG/IMO (SEA):	<p>UN/ID no UN2588 Hazard Class 6.1 Packing Group III Proper shipping name Pesticide, solid, toxic, n.o.s. Description UN2588, Pesticide, solid, toxic, n.o.s. (Milbemycin A3), 6.1, III Special Provisions 61, 223, 274 EmS-No F-A, S-A</p>
IATA/DGR (AIR):	<p>UN/ID no UN2588 Hazard Class 6.1 Packing Group III Proper shipping name Pesticide, solid, toxic, n.o.s. Description UN2588, Pesticide, solid, toxic, n.o.s. (Milbemycin A3), 6.1, III</p>
Special Provisions:	N/A

SECTION 15: Regulatory Information

Health Phrases:	<p>H302 Harmful if swallowed H332 Harmful if inhaled H350 May cause cancer</p>
Risk Phrases:	<p>P201 Obtain special instructions before use P202 Do not handle until all safety precautions have been read and understood P281 Use personal protective equipment as required P264 Wash face, hands and any exposed skin thoroughly after handling P270 Do not eat, drink or smoke when using this product P261 Avoid breathing dust/fume/gas/mist/vapors/spray P271 Use only outdoors or in a well-ventilated area</p>
Safety Phrases:	<p>P308+311 IF exposed or concerned: Get medical advice/attention P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P301+312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell P330 Rinse mouth P405 Store locked up P501 Dispose of contents/container to an approved waste disposal plant</p>
EU Regulations:	N/A
US Regulations:	<p>TSCA: Not listed California Proposition 65: This product does not contain any Proposition 65 chemicals</p>
U.S. Federal Regulations:	<p>SARA 302/304/311/312 extremely hazardous substances: No products were found SARA 302/304 emergency planning and notification: No products were found.</p>

	<p>SARA 302/304/311/312 hazardous chemicals: No products were found. SARA 311/312 MSDS distribution-chemical inventory-hazard identification: Milbemycin A3 (CAS 51596-10-2) SARA 313 toxic chemicals notification and release reporting: No products were found.</p> <p>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: No Products were found.</p>
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.*