

Safety Data Sheet


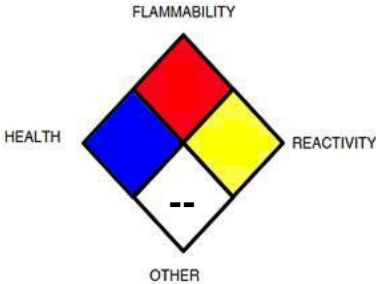
Section 1: Product & Company Identification

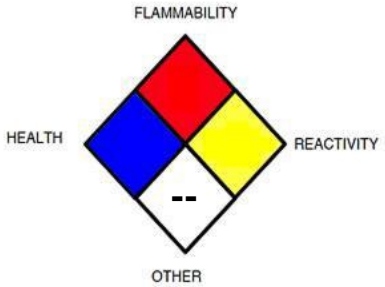
Product Name:	Milbemectin
Product #:	M-2583
Synonyms:	Milbemectin A3 and A4
Supplier:	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego, CA 92131 Tele# + 858-452-9925
Emergency Tele#:	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

Section 2: Composition / Information on Ingredients

Component	CAS #	EC #	% Composition
Milbemectin	1799297-76-9		

Section 3: Hazards Identification

Symbols	
HMIS Classification	<p>FLAMMABILITY</p>  <p>HEALTH REACTIVITY</p> <p>OTHER</p>

NFPA Classification	
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Section 4: First Aid Measures

General Overview:	Consult physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. Symptoms of poisoning may occur after several hours.
Inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin:	Wash off with soap and plenty of water. Consult a physician.
Eyes:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult 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 water spray, alcohol-resistant foam, dry chemical, or carbon dioxide. Fight fire according to surrounding conditions.
Hazardous thermal (de)composition products:	Carbon monoxide, carbon dioxide
Special Fire Fighting Procedures:	Wear self-contained breathing apparatus for firefighting if necessary.
Flash Point:	No data available

Section 6: Accidental Release Measures





Personal Precautions:	Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, dust, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental Precautions:	Do not let product enter drains.

Methods for Clean-up:	Pick up and arrange disposal without creating dust using wet towels, for example. Keep in suitable, closed containers for disposal.
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SECTION 7: Handling & Storage

Storage:	Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: -20°C
Handling:	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

SECTION 8: Exposure controls / Personal Protection

Respiratory Protection:	 <p>Wear NIOSH / MSHA approved respirator if required.</p>
Skin and Body:	  <p>Handle with gloves. Lab coat.</p>
Eyes:	 <p>Tightly fitting safety goggles. Face shield.</p>
Ventilation/Engineering Measures:	Ensure adequate ventilation.
Hygiene:	Handle in accordance with good industrial hygiene and safety practice.

Other:	This product does not contain any hazardous materials with occupational exposure limits established by region-specific regulatory bodies.
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SECTION 9: Physical and Chemical Properties

Appearance & Odor:	White powder
Formula	C ₃₂ H ₄₆ O ₇
Molecular Wt.	542.7
Melting Pt.	No data available
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:	Ethanol, Methanol, DMF, DMSO
Flash Point:	No data available
Autoignition Temp:	No data available

SECTION 10: Stability and Reactivity

Stability:	Stable under recommended storage conditions.
Hazardous decomposition products:	No data available
Materials to Avoid:	Strong oxidizing agents, strong acids, strong bases
Conditions to avoid:	No data available

SECTION 11: Toxicological Information

RTECS#:	N/A
ACUTE Toxicity:	LD50 Oral = 762 mg/kg (Rat, male) LD50 Oral = 456 mg/kg (Rat, female) LD50 Oral = 324 mg/kg (Mouse, male) LD50 Oral = 313 mg/kg (Mouse, female) LC50 Inhalation = 1.9 mg/L (Rat, male) LC50 Inhalation = 2.8 mg/L (Rat, female) LD50 Dermal = >5,000 mg/kg (Rat)
CHRONIC Toxicity:	No data available
Chronic Exposure: Carcinogen: Mutagen: Teratogen:	IARC: 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.

Reproductive:	<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>
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SECTION 12: Ecological Information

Ecotoxicity:	<p>Toxic to crustacea; EC50 10 ug/L, 48 h (Daphnia magna) Very toxic for fish Very toxic for aquatic organisms. Water hazard class 3 Do not allow product to reach ground water, water courses, or sewage systems.</p>
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:	Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated Packaging:	Dispose of as unused product.

SECTION 14: Transportation Information

UN ID#:	3077
ADR / RID (LAND):	N/A
DOT regulations:	<p>UN 3077 Packing Group III Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Milbemectin) Marine pollutant</p>
IMDG/IMO (SEA):	<p>UN 3077 Packing Group III</p>

	Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Milbemectin) Marine pollutant
IATA/DGR (AIR):	UN 3077 Packing Group III Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Milbemectin)
Special Provisions:	N/A

SECTION 15: Regulatory Information

Health Phrases:	Danger! H302 - Harmful if swallowed H332 - Harmful if inhaled H370 - Causes damage to organs H373 - May cause damage to organs through prolonged or repeated exposure H400 - Very toxic to aquatic life H410 - Very toxic to aquatic life with long-lasting effects
Risk Phrases:	P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood P264 - Wash skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P273 - Avoid release to the environment P280 - Wear protective gloves /clothing/ eye protection/ face protection P301 + P312 - IF SWALLOWED: Immediately call a POISON CENTER/doctor P330 - Rinse mouth P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing P308 + P313 - If exposed or concerned, get medical advice or attention P314 - Get medical attention if subject feels unwell P391 - Collect spillage P405 - Store locked up P501 - Dispose of contents/ container to an approved waste disposal plant
Safety Phrases:	N/A
EU Regulations:	N/A
US Regulations:	TSCA: Not listed California Proposition 65: No products were found
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.

	<p>Clean Water Act (CWA) 307: No products were found.</p> <p>Clean Water Act (CWA) 311: No products were found.</p> <p>Clean Air Act (CAA) 112 accidental release prevention: No products were found.</p> <p>Clean Air Act (CAA) 112 regulated flammable substances: No products were found.</p> <p>Clean Air Act (CAA) 112 regulated toxic substances: No products were found.</p> <p>OSHA: Acute toxicity, oral (Cat. 4)</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.*