

Safety Data Sheet

Section 1: Product & Company Identification

Product Name:	Ivermectin
Product #:	I-2570
Synonyms:	22,23-dihydro Avermectin B1; L-640,471; MK-933
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
Ivermectin	70288-86-7	274-536-0	≥98%

Section 3: Hazards Identification

Symbols	
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HMIS Rating

Health Hazard	Chronic Health Hazard	Flammability	Physical Hazard
3	*	0	0

NFPA Rating

Health Hazard	Fire Hazard	Reactivity Hazard
4	0	0

Section 4: First Aid Measures

General Overview:	Immediately remove any clothing soiled by the product. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least. 48 hours after the accident. In case of irregular breathing or respiratory arrest provide artificial respiration.
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Inhalation:	In case of unconsciousness place patient stably in side position for transportation.
Skin:	Immediately wash with water and soap and rinse thoroughly.
Eyes:	Rinse opened eyes for several minutes under running water. Then consult a doctor.
Ingestion:	Do not induce vomiting; immediately call for medical help.
	See section 11 for more detailed information on health effects & symptoms.

SECTION 5: Fire Fighting Measures

Flammability of the product:	Product is not flammable
Extinguishing Media:	Use fire fighting measures that suit the environment. A solid water stream may be inefficient.
Hazardous thermal (de)composition products:	No data available
Special Fire Fighting Procedures:	No special measures required.
Flash Point:	No data available

Section 6: Accidental Release Measures





Personal Precautions:	Not required.
Environmental Precautions:	Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/surface or ground water.
Methods for Clean-up:	Dispose contaminated material as waste according to section 13.

SECTION 7: Handling & Storage

Storage:	Recommended storage temperature: -20°C
Handling:	Thorough dedusting.

SECTION 8: Exposure controls / Personal Protection

Respiratory Protection:	
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	 <p>In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.</p>
Skin and Body:	  <p>Lab coat and protective gloves. The glove material has to be impermeable and resistant to the product/the substance/the preparation. Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.</p>
Eyes:	 <p>Tightly sealed goggles</p>
Ventilation/Engineering Measures:	Ensure adequate ventilation.
Hygiene:	Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid contact with the eyes and skin.
Other:	Contains no substances with occupational exposure limit values.

SECTION 9: Physical and Chemical Properties

Appearance & Odor:	Solid. Characteristic odor.
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Formula	C ₄₈ H ₇₄ O ₁₄ (for Ivermectin B _{1a})
Molecular Wt.	875.1
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:	DMF (3 mg/mL); DMSO (1 mg/mL); Ethanol (1 mg/mL)
Flash Point:	No data available
Autoignition Temp:	No data available

SECTION 10: Stability and Reactivity

Stability:	No decomposition if used according to specifications.
Hazardous decomposition products:	No data available
Materials to Avoid:	No data available
Conditions to avoid:	No data available

SECTION 11: Toxicological Information

RTECS#:	N/A
ACUTE Toxicity:	N/A
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:	Water hazard class 3 (Self-assessment): extremely hazardous for water. Do not allow product to reach ground water, water course or sewage
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	system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground. Also poisonous for fish and plankton in water bodies. Very toxic for aquatic organisms.
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:	Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Contaminated Packaging:	Disposal must be made according to official regulations.

SECTION 14: Transportation Information

UN ID#:	UN3288
ADR / RID (LAND):	N/A
DOT regulations:	<p>Toxic solid, inorganic, n.o.s. (Ivermectin) Class: 6.1 Toxic substances Label 6.1 Packing group: I</p> <p>Quantity limitations: On passenger aircraft/rail: 5 kg On cargo aircraft only: 50 kg</p>
IMDG/IMO (SEA):	<p>TOXIC SOLID, INORGANIC, N.O.S. (Ivermectin) Class: 6.1 Toxic substances Label 6.1 Packing group: I</p> <p>Limited quantities (LQ): 0</p> <p>Excepted quantities (EQ) Code: E5 Maximum net quantity per inner packaging: 1 g Maximum net quantity per outer packaging: 300 g</p>
IATA/DGR (AIR):	<p>Toxic solid, inorganic, n.o.s. (Ivermectin) Class 6.1 Toxic substances Label 6.1</p>

	<p>Packing group: I</p> <p>When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity.</p>
Special Provisions:	<p>Environmentally hazardous substance, solid</p> <p>Warning: Toxic substances</p> <p>Hazard identification number (Kemler code): 66</p> <p>EMS Number: F-A,S-A</p> <p>Stowage Category: B</p>

SECTION 15: Regulatory Information

Health Phrases:	<p>Danger!</p> <p>H300 Fatal if swallowed.</p> <p>H311 Toxic in contact with skin.</p> <p>H361 Suspected of damaging fertility or the unborn child.</p> <p>H370 Causes damage to organs.</p> <p>H372 Causes damage to organs through prolonged or repeated exposure.</p> <p>H410 Very toxic to aquatic life with long lasting effects.</p>
Risk Phrases:	<p>P201 Obtain special instructions before use.</p> <p>P202 Do not handle until all safety precautions have been read and understood.</p> <p>P260 Do not breathe dust/fume/gas/mist/vapors/spray.</p> <p>P264 Wash thoroughly after handling.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves/protective clothing/eye protection/face protection.</p>
Safety Phrases:	<p>P301+P310 If swallowed: Immediately call a poison center/doctor.</p> <p>P321 Specific treatment (see on this label).</p> <p>P330 Rinse mouth.</p> <p>P302+P352 If on skin: Wash with plenty of water.</p> <p>P308+P313 IF exposed or concerned: Get medical advice/attention.</p> <p>P312 Call a poison center/doctor if you feel unwell.</p> <p>P314 Get medical advice/attention if you feel unwell.</p> <p>P361+P364 Take off immediately all contaminated clothing and wash it before reuse.</p> <p>P391 Collect spillage.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/container in accordance with local/regional/national/international regulations.</p>
EU Regulations:	N/A
US Regulations:	<p>TSCA: Not listed</p> <p>California Proposition 65: No products were found</p>

U.S. Federal Regulations:	<p>SARA 302/304 emergency planning and notification: No products were found.</p> <p>SARA 311/312 MSDS distribution-chemical inventory-hazard identification: No products were found.</p> <p>SARA 313 toxic chemicals notification and release reporting: No products were found.</p> <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. 2), Acute Toxicity – Dermal (Cat. 3); Toxic to Reproduction (Cat. 2); Specific Target Organ Toxicity – Single Exposure (Cat. 1); Specific Target Organ Toxicity – Repeated Exposure (Cat. 1); Aquatic Acute (Cat. 1); Aquatic Chronic (Cat. 1)</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.*