



Section 1: Company Information

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Section 2: Chemical Identification

Part#: PA 035-097-001
Name: Avermectin B1b

Section 3: Composition/Information on Ingredient

CAS#: 65195-56-4
Molecular Formula: $C_{47}H_{70}O_{14}$
Synonyms: (1'R,2R,3S,4'S,6S,8'R,10'E,12'S,13'S,14'E,16'E,20'R,21'R,24'S)-21',24'-dihydroxy-12'-[(2R,4S,5S,6S)-5-[(2S,4S,5S,6S)-5-hydroxy-4-methoxy-6-methyloxan-2-yl]oxy-4-methoxy-6-methyloxan-2-yl]oxy-3,11',13',22'-tetramethyl-2-propan-2-ylspiro[2,3-dihydropyran-6,6'-3,7,19-trioxatetracyclo[15.6.1.14,8.020,24]pentacosa-10,14,16,22-tetraene]-2'-one
EC#: 265-611-9

Section 4: Hazards Identification

Emergency Overview:

- H300: Fatal if swallowed.
- H332: Harmful if inhaled.
- H400: Very toxic to aquatic life.
- P261: Avoid breathing {dust/fume/gas/mist/vapors/spray}.
- P264: Wash {hands} thoroughly after handling.
- P273: Avoid release to the environment. GHS Precaution Phrases:
- P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P312: Call a POISON CENTER or doctor/physician if you feel unwell.
- P330: Rinse mouth.
- P391: Collect spillage.
- For additional information on toxicity, please refer to Section 12.

Section 5: First-Aid Measures:

Oral Exposure:

Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

Inhalation Exposure:

Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.

Dermal Exposure:

Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

Eye Exposure:

Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.

Section 6: Fire Fighting Measures:

Flash Point:

NA

Autoignition Temperature:

NA

Extinguishing Media:

Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. May emit toxic fumes under fire conditions.

Exposure Hazard(s):

NA

Section 7: Accidental Release Measures

Procedure to be Followed in Case of Leak or Spill:

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust. Collect and dispose of in accordance with local regulations.

Procedure(s) of Personal Precaution(s):

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

Methods for Cleaning Up:

Sweep up, place in a bag, and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete. Prevent product from entering drains.

Section 8: Handling and Storage

Handling:

Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

Storage:

<-5 degrees C; dark

Special Requirements:

NA

Section 9: Exposure controls and Personal Protection

Engineering Controls:

Safety shower and eye bath. Use only in a chemical fume hood.

Personal Protection Equipment:

Respiratory – Wear dust mask.

Hand – Compatible chemical-resistant gloves.

Eye – Chemical Safety goggles.

General Hygiene Measures:

Wash contaminated clothing before reuse. Wash thoroughly after handling.

Section 10: Physical and Chemical Properties

Appearance:

Solid powder

| Property | Value | At Temperature or Pressure |
|-----------------------|---------------|----------------------------|
| Molecular Weight | 859.063 g/mol | |
| pH | NA | |
| bp/bp Range | NA | |
| mp/mp Range | NA | |
| Freezing Point | NA | |
| Vapor Pressure | NA | |
| Vapor Density | NA | |
| Saturated Vapor Conc. | NA | |
| SG/Density | NA | |
| Bulk Density | NA | |
| Odor Threshold | NA | |
| Volatile% | NA | |
| VOC Content | NA | |
| Water Content | NA | |
| Solvent Content | NA | |
| Evaporation Rate | NA | |
| Viscosity | NA | |
| Surface Tension | NA | |
| Partition Coefficient | NA | |
| Decomposition Temp. | NA | |
| Flash Point | NA | |
| Explosion limits | NA | |
| Flammability | NA | |
| Autoignition Temp | NA | |
| Refractive Index | NA | |
| Optical Rotation | NA | |
| Miscellaneous Data | NA | |
| Solubility | NA | |

Section 11: Stability and Reactivity

Stability:

Stable.

Avoid strong oxidizing agents and strong reducing agents.

Hazardous Decomposition Products:

Carbon monoxide, Carbon dioxide.

Hazardous Polymerization:

NA

Section 12: Toxicological Information

The toxicological effects of this product have not been thoroughly studied.

Route of Exposure:

Skin Contact – May cause skin irritation.

Skin Absorption – May be harmful if absorbed through skin.

Eye Contact – May cause eye irritation.

Inhalation – May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion – May be harmful if swallowed.

Sensitization:

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Target Organ(s) or System(s)

NA

Signs and Symptoms of Exposure:

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

Conditions Aggravated by Exposure:

NA

Toxicity Data:

NA

Irritation Data:

NA

Chronic Exposure:

NA

Section 13: Ecological information

NA

Section 14: Disposal Considerations

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and a scrubber. Observe all federal, state and local environmental regulations.



Section 15: Transportation Information

DOT:

DOT Proper Shipping Name: Pesticide, solid, toxic, n.o.s.(Avermectin B1b)
DOT Hazard Class: 6.1 POISON
UN/NA Number: 2588
Packing Group II

ADR/RID Land Transport

ADR/RID Shipping Name: Pesticide, solid, toxic, n.o.s.(Avermectin B1b)
Hazard Class: 6.1 POISON
UN Number: 2588
Packing Group II

Air Transport (ICAO/IATA)

ADR/RID Shipping Name: Pesticide, solid, toxic, n.o.s.(Avermectin B1b)
IATA Hazard Class: 6.1 POISON
UN Number: 2588
Packing Group II

Marine Pollutant:

Highly toxic to aquatic life.

Section 16: Regulatory Information

EU Additional Classification:

NA

US Classification and Label Text:

NA

United States Regulatory Information:

SARA – NO

TSCA – NO

Canada Regulatory Information:

WHMIS – This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR

DSL – No

NDSL – No

Section 17: Other Information

* For R&D use only. Not for drug, household or other uses.

* The above information is believed to be true and correct, but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. PlantaAnalytica LLC shall not be held liable for any damage resulting from handling or contact with the above product.

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