Planta Analytica
REFERENCE STANDARDS & ANALYTICAL SERVICES

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MATERIAL SAFETY DATA SHEET

Emamectin B1b

Section 1: Company Information

Company:	Planta Analytica, Inc.
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Section 2: Chemical Identification

Compound Name: Emamectin B1b
IUPAC Name: (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)-4-methoxy-5-[(2S,4S,5R,6S)-4-methoxy-6-methyl-5-(methylamino)oxan-2-yl]oxy-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

Section 3: Composition / Information on Ingredients

CAS #: 121424-52-0
Molecular Formula: C48H73NO13
Synonyms: N/A
EC #: N/A

Section 4: Hazards Identification

Emergency Overview:

The chemical, physical, and toxicological properties of this product have not been thoroughly investigated. For additional information on toxicity, please refer to Section 12.

Section 5: First-Aid Measures

Oral Exposure:

If swallowed, rinse out mouth with water, provided that the person is conscious. Call a physician.

Inhalation Exposure:

If inhaled, remove the person to fresh air. If the person is not breathing, give artificial respiration. If breathing becomes difficult, give oxygen. Call a physician.

Dermal Exposure:

In case of skin contact, immediately wash skin with soap and copious amounts of water. Call a physician.

Eye Exposure:

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 6: Fire-Fighting Measures

Flash Point:

N/A

Autoignition Temperature:

N/A

Extinguishing Media:

Water spray, 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):

N/A

Section 7: Accidental Release Measures

Procedure to be Followed in Case of Leak or Spill:

N/A

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 spill, 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, or on clothing. Avoid prolonged or repeated exposure.

Storage:

< -20 °C; in dark

Special Requirements:

N/A

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 reusing. Wash thoroughly after handling.

Section 10: Physical and Chemical Properties

Appearance: N/A

Property	Value	At Temperature or Pressure
Molecular Weight	872.100 g/mol	
pH	N/A	
bp/bp Range	N/A	
mp/mp Range	N/A	
Freezing Point	N/A	
Vapor Pressure	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
SG/Density	N/A	
Bulk Density	N/A	
Odor Threshold	N/A	
Volatile %	N/A	
VOC Content	N/A	
Water Content	N/A	
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	N/A	
Surface Tension	N/A	
Partition Coefficient	N/A	
Decomposition Temp.	N/A	
Flash Point	N/A	
Explosion limits	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Refractive Index	N/A	
Optical Rotation	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

Section 11: Stability and Reactivity

Stability:

Product is stable.

Hazardous Decomposition Products:

Carbon monoxide, Carbon dioxide.

Hazardous Polymerization:

N/A

Section 12: Toxicological Information

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):

N/A

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:

N/A

Toxicity Data:

N/A

Irritation Data:

N/A

Chronic Exposure:

N/A

Section 13: Ecological Information

N/A

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:

Proper Shipping Name — None. This substance is considered non-hazardous for transport.

IATA:

This substance is considered non-hazardous for air transport.

Marine Pollutant:

N/A

Section 16: Regulatory Information

EU Additional Classification:

N/A

US Classification and Label Text:

N/A

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 regarding appropriate safety precautions. It does not represent any guarantee of the properties of the product. Planta Analytica, Inc. shall not be held liable for any damage resulting from handling or contact with the above product.

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