

Emamectin Benzoate tech. min. 95%

Safety Data Sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form	: Substance
Substance name	: Emamectin Benzoate tech. min. 95%
EC-No.	: 605-015-1
CAS-No.	: 155569-91-8
Type of product	: Biocidal products (e.g. Disinfectants, pest control)

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category	: Industrial use, Professional use
Use of the substance/mixture	: Insecticide Acaricide

1.2.2. Uses advised against

No additional information available.

1.3. Details of the supplier of the safety data sheet

COCREATE GLOBAL TECHNOLOGIES PRIVATE LIMITED
FFK Towers, #445, 2nd & 3rd Floor, 17th Cross Road, Sector 4,
HSR Layout, Bangalore, Bangalore South, Karnataka - 560102, India.

Email: info@scimplify.com

Website: www.scimplify.com

1.4. Emergency telephone number

NA

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] with its amendment Regulation (EU) 2016/1179

Acute toxicity (oral), Category 3	H301
Acute toxicity (dermal), Category 3	H311
Acute toxicity (inhalation: dust, mist) Category 3	H331
Serious eye damage/eye irritation, Category 2	H319
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400
Hazardous to the aquatic environment — Chronic Hazard, Category 1	H410

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Toxic in contact with skin. Toxic if inhaled. Toxic if swallowed. Causes serious eye irritation. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] with its amendment Regulation (EU) 2016/1179

Hazard pictograms (CLP)



GHS06

GHS09

Signal word (CLP)

: Danger

Hazard statements (CLP)

: H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled.
H319 - Causes serious eye irritation.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP)

: P261 - Avoid breathing dust.
P264 - Wash hands thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear protective clothing, protective gloves, eye protection, respiratory protection.
P301+P310 - IF SWALLOWED: Immediately call a doctor.
P391 - Collect spillage.
P501 - Dispose of contents and container to an approved waste disposal plant.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : Emamectin Benzoate tech. min. 95%
CAS-No. : 155569-91-8
EC-No. : 605-015-1

Name	Product identifier	Conc . (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP] with its amendment Regulation (EU) 2016/1179
Emamectin benzoate (Active substance (Biocide))	(CAS-No.) 155569-91-8 (EC-No.) 605-015-1	>= 90	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-phrases: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Take medical advice.
First-aid measures after skin contact : Take off immediately all contaminated clothing. Wash skin with plenty of water.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth. Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Give a slurry of activated charcoal in water to drink. immediate medical advice.

4.1. Most important symptoms and effects, both acute and delayed

Symptoms/effects : Pupil dilation, nose bleeding, tremors, convulsions.
Symptoms/effects after eye contact : Eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Presents no particular fire or explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon oxides (CO, CO₂). Nitrogen oxides.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin, eyes and clothing. Avoid breathing dust.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.3. Environmental precautions

Avoid release to the environment.

6.4. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

6.4 Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions for safe handling : Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place. Keep container tightly closed. Store locked up.

Incompatible products : Strong acids. Strong bases. Strong oxidation agent.

Heat and ignition sources : Keep away from heat and direct sunlight.

7.3 Specific end use(s)

No additional information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

No additional information available.

8.2 Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protective equipment:

protective clothing. Gloves. Safety glasses. Insufficient ventilation: wear respiratory protection.

Hand protection:					
Wear suitable gloves resistant to chemical penetration. Chemical resistant gloves (according to European standard NF EN 374 or equivalent)					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Gloves	Nitrile rubber (NBR), butyl rubber, Neoprene rubber (HNBR), Polyvinylchloride (PVC)	6 (> 480 minutes)	>0.11		EN 374
Eye protection:					
Safety glasses. Standard EN 166 - Personal eye-protection - specifications					
Skin and body protection:					
Wear suitable protective clothing. EN 340					
Respiratory protection:					
Wear respiratory protection. EN 143					
Device	Filter type	Condition		Standard	
breathing apparatus with filter	Type P3	Dust protection		EN 143	

Personal protective equipment symbol(s):



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Crystalline powder.
Colour	: white. Off-white.
Odour	: Odourless.
Odour threshold	: No data available.
pH	: No data available.
Relative evaporation rate (butylacetate=1)	: No data available.
Melting point	: 141 - 146 °C
Freezing point	: No data available.
Boiling point	: No data available.
Flash point	: > 100 °C
Auto-ignition temperature	: No data available.
Decomposition temperature	: No data available.
Flammability (solid, gas)	: No data available.
Vapour pressure	: No data available.
Relative vapour density at 20 °C	: No data available.
Relative density	: No data available.
Density	: 0,6 g/cm ³
Solubility	: Water: 7 - 10 µg/l Ethanol: 20 g/l Acetone: 100 g/l
Log Pow	: No data available.
Viscosity, kinematic	: No data available.
Viscosity, dynamic	: No data available.
Explosive properties	: No data available.
Oxidising properties	: No data available.
Explosive limits	: Not applicable

9.2. Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidation agent.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Toxic if swallowed.
Acute toxicity (dermal)	: Toxic in contact with skin.
Acute toxicity (inhalation)	: Toxic if inhaled.

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Very toxic to aquatic life with long lasting effects.

Emamectin benzoate (155569-91-8)	
LC50 fishes 1	0,003 mg/l (Oncorhynchus mykiss)
LC50 fish 2	0,0096 mg/l (Lepomis macrochirus)

12.2. Persistence and degradability

No additional information available.

12.3. Bioaccumulative potential

No additional information available.

12.4. Mobility in soil

No additional information available.

12.5. Results of PBT and vPvB assessment
Emamectin Benzoate tech. min. 95% (155569-91-8)
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
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SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 2811	UN 2811	UN 2811	UN 2811	UN 2811
14.2. UN proper shipping name				
TOXIC SOLID, ORGANIC, N.O.S. (CONTAINS : Emamectin benzoate)	TOXIC SOLID, ORGANIC, N.O.S. (CONTAINS:Emamectin benzoate)	Toxic solid, organic, n.o.s. (CONTAINS : Emamectin benzoate)	TOXIC SOLID, ORGANIC, N.O.S. (CONTAINS : Emamectin benzoate)	TOXIC SOLID, ORGANIC, N.O.S. (CONTAINS : Emamectin benzoate)
Transport document description				
UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (CONTAINS : Emamectin benzoate), 6.1, II, (D/E), ENVIRONMENTALLY HAZARDOUS	UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (CONTAINS : Emamectin benzoate), 6.1, II, Marine Pollutant/Environmentally Hazardous	UN 2811 Toxic solid, organic, n.o.s. (CONTAINS : Emamectin benzoate), 6.1, II, ENVIRONMENTALLY HAZARDOUS	UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (CONTAINS : Emamectin benzoate), 6.1, II, ENVIRONMENTALLY HAZARDOUS	UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (CONTAINS : Emamectin benzoate), 6.1, II, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)				
6.1	6.1	6.1	6.1	6.1

14.4. Packing group				
II	II	II	II	II
14.5. Environmental hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information available.				
14.6. Special precautions for user				

Overland transport

Classification code (ADR)	: T2
Special provisions (ADR)	: 274, 614
Limited quantities (ADR)	: 500g
Excepted quantities (ADR)	: E4
Packing instructions (ADR)	: P002, IBC08
Special packing provisions (ADR)	: B4
Mixed packing provisions (ADR)	: MP10
Portable tank and bulk container instructions (ADR)	: T3
Portable tank and bulk container special provisions (ADR)	: TP33
Tank code (ADR)	: SGAH, L4BH
Tank special provisions (ADR)	: TU15, TE19
Vehicle for tank carriage	: AT
Transport category (ADR)	: 2
Special provisions for carriage - Packages (ADR)	: V11
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13, CV28
Special provisions for carriage - Operation (ADR)	: S9, S19
Hazard identification number (Kemler No.)	: 60
Orange plates	:

Tunnel restriction code (ADR)	: D/E
EAC code	: 2X

Transport by sea

Special provisions (IMDG)	: 274
Packing instructions (IMDG)	: P002
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B21, B4
Tank instructions (IMDG)	: T3
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-A
Stowage category (IMDG)	: B
Properties and observations (IMDG)	: Toxic if swallowed, by skin contact or by inhalation.

Air transport

PCA Excepted quantities (IATA)	: E4
PCA Limited quantities (IATA)	: Y644
PCA limited quantity max net quantity (IATA)	: 1kg
PCA packing instructions (IATA)	: 669
PCA max net quantity (IATA)	: 25kg
CAO packing instructions (IATA)	: 676

CAO max net quantity (IATA) : 100kg
 Special provisions (IATA) : A3, A5
 ERG code (IATA) : 6L

Inland waterway transport

Classification code (ADN) : T2
 Special provisions (ADN) : 274, 614, 802
 Limited quantities (ADN) : 500 g
 Excepted quantities (ADN) : E4
 Equipment required (ADN) : PP, EP
 Number of blue cones/lights (ADN) : 2

Rail transport

Classification code (RID) : T2
 Special provisions (RID) : 274, 614
 Limited quantities (RID) : 500g
 Excepted quantities (RID) : E4
 Packing instructions (RID) : P002, IBC08
 Special packing provisions (RID) : B4
 Mixed packing provisions (RID) : MP10
 Portable tank and bulk container instructions (RID) : T3
 Portable tank and bulk container special provisions (RID) : TP33
 Tank codes for RID tanks (RID) : SGAH, L4BH
 Special provisions for RID tanks (RID) : TU15
 Transport category (RID) : 2
 Special provisions for carriage – Packages (RID) : W11
 Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW28, CW31
 Colis express (express parcels) (RID) : CE9
 Hazard identification number (RID) : 60

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Emamectin Benzoate tech. min. 95% is not on the REACH Candidate List

Emamectin Benzoate tech. min. 95% is not on the REACH Annex XIV List

Emamectin Benzoate tech. min. 95% is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Emamectin Benzoate tech. min. 95% is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products

This product contains biocidal products

Type of product (Biocide) : 18 - Insecticides, acaricides and products to control other arthropods

Authorisation number :

Contains : Emamectin benzoate (%)

Directive 2012/18/EU (SEVESO III)

Seveso III Part I (Categories of dangerous substances)	Qualifying quantity (tonnes)	
	Lower-tier	Upper-tier
H2 ACUTE TOXIC — Category 2, all exposure routes — Category 3, inhalation exposure route	50	200
E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1	100	200

15.1.2. National regulations

No additional information available.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information	
Abbreviations and acronyms:	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ATE	Acute Toxicity Estimate
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LD50	Median lethal dose
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Data sources	: according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2016/1179.
Other information	: DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable. REACH Disclaimer: This information is based on current knowledge. Consistency of data in the SDS with CSR is considered, as far as the information is available at the time of compilation (cfr Revision date and Version number).

Full text of H- and EUH-statements:	
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.