

according to regulation Nr. 1907/2006/EG  
(amended by regulation regulation  
Nr. 453/2010/EG)

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Bionema Limited, Swansea University,  
Singleton Park, Swansea, SA2 8PP

### 1. Identification of the substance/mixture and of the company

#### 1.1 Product identifier

Substance /Trade name:

*Heterorhabditis bacteriophora*

EG-No.: not applicable for living organisms

CAS-No.: not applicable for living organisms

Other means of identification:

Entomopathogenic nematode

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

Biological plant protection agent, insecticide

#### 1.3 Details of the supplier of the safety data sheet

Bionema Limited

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Swansea University, Singleton Park, Swansea, SA2 8PP

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#### 1.4 Emergency contact

The product doesn't contain any harmful substances

### 2. Hazards identification

#### 2.1 Classification of the substance or mixture

According regulation Nr. 1272/2008/EG:

None

According directives 67/548/EG and 1999/45/EG:

None

According directive 1907/2006/EG:

None

### 3. Composition/information on ingredients

#### 3.1 Substances

Active ingredient

Name:

*Heterorhabditis bacteriophora* (living organism,  
entomopathogenic nematode)

EG-Nr.: Not available for living organisms

CAS-Nr.: Not available for living organisms

Stabilisers, hazard impurities:

Contains no admixtures with labelling obligation

#### 3.2 Mixtures

Not a mixture of active ingredients

### 4. First aid measures

#### 4.1 Description of first aid measures

Following inhalation:

Only in case of massive inhalation:

Move the affected person outside the danger zone.

Contact a doctor.

Following skin contact:

Clean with water and soap.

Following eye contact:

Flush eye for 10 minutes with water. In case of persistent  
eye irritation contact a doctor.

Following ingestion:

Flush mouth with water several times and spit it out.

Drink two cups of water afterwards. No further aid  
measures are necessary.

#### 4.2 Most important symptoms and effects, both acute and delayed

Irritation of the respiratory system and eyes.

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

None

### 5. Fire-fighting measures

#### 5.1 Extinguishing media:

All fire extinguishing media are appropriate.

#### 5.2 Special hazards arising from the substance or mixture

None

#### 5.3 Advice for fire-fighters :

No special advises

### 6. Accidental release measure

#### 6.1 Personal precautions, protective equipment and emergency procedures:

None

#### 6.2 Environmental precautions:

None

#### 6.3 Methods and material for containment and cleaning up:

Wear dust mask, eye protection, gloves. Clean  
contaminated area mechanical and/or with water.

#### 6.4 Reference to other sections:

13. Disposal consideration

### 7. Handling and storage

#### 7.1 Precautions for safe handling

Protective measures:

Don't eat or drink when handling the product.

**Advice on general occupational hygiene:**

Wash hands after handling the product.

**Advice on safe handling:**

Wear dusk mask, eye protection, cloves.

**Fire preventions:**

None

**Aerosol and dust generation preventions:**

None

**Environmental precautions:**

None

**7.2 Conditions for safe storage, including any incompatibilities:****Technical measures and storage conditions:**

Store in the dark at 4-10°C. Don't freeze.

Don't expose to sunlight.

**Hints on storage assembly:**

None. Opened bags should be used up.

**Storage class:**

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**7.3 Specific end uses**

None

**8. Exposure controls/personal protection****8.1 Control parameters:**

None

**8.2 Exposure controls****8.2.1 Appropriate engineering controls**

Not applicable

**8.2.2 Personal protective equipment:****Eyes / face:**

Protective glasses

**Skin protection:**

Gloves

**Respiratory protection:**

Dust mask

**9. Physical and chemical properties****9.1 Information on basic physical and chemical properties**

Appearance	Powder
- Physical state:	
- Colour:	Ochre
Odor:	Wet clay
Odour threshold:	Unknown
Density:	Unknown
pH:	7-8 (100 g/l water, 20°C)
Oxidising compounds:	None
Freezing point:	0°C/-1°C (product contains water)
Boiling point:	100 °C (product contains water)
Flashpoint:	Unknown
Ignition temperature	Unknown
Explosive compounds:	None
Vapour pressure, density:	Not applicable
Solubility n-octanol/water:	Not applicable
Viscosity:	Not applicable

**9.2 Other safety information**

None

**10. Chemical stability and reactivity**

Not applicable

**11 Toxicological information****11.1 Information on toxicological effects****Acute toxicity:**

Not toxic, &gt; 5g/kg (Maus, oral)

**Skin corrosion/irritation:**

None

**Serious eye damage/irritation:**

None

**Irritation to respiratory tract:**

Unknown

**Carcinogenicity/mutagenicity:**

Not applicable

**12. Ecological information****12.1 Toxicity for non-target organisms**

Not toxic or pathogenic against birds, reptiles, amphibians, fish, bees or earthworms. Side-effects are limited to soil born insects.

**12.2 Persistence and degradability:**

Not applicable

**12.3 Bioaccumulative potential:**

Not applicable

**12.4 Mobility in the soil:**

Not applicable

**12.5 Results of PBT and vPvB assessment:**

Not applicable

**12.6 Other adverse effect:**

Unknown

**13. Disposal consideration****13.1 Waste treatment methods:**Product /Packaging disposal:  
General trash / packaging wasteWaste codes / waste designations  
according to EWC /AVV :  
16 03 04, 16 03 06**14. Transport information****14.1-3 UN-numbers (land, sea, air)**No hazardous material as defined  
in the transportation directives**ADR/RID / IMDG-Code / ICAO-TI / IATA-DGR:**

None

**Marine Pollutant:**

No

**Packing group:**

None

**14.4 Transport in bulk according to Annex II of MARPOL 7 3/78 and the IBC Code:**No hazardous material as defined  
in the transportation directives