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

Product identifier
Substance: Heterorhabditis bacteriophora
Trade name: nematop®

Other means of identification:
Living organisms, entomopathogenic nematode

Relevant identified uses of the substance or mixture and uses advised against
Biological plant protection agent, insecticide

Details of the supplier of the safety data sheet
Company: e-nema GmbH
Street name: Klausdorfer Str. 28-36
Postal code/town name: 24223 Schwentinental

Contact for technical information
Dr. Olaf Strauch, e-nema GmbH, Klausdorfer Str. 28-36, 24223 Schwentinental
Phone / Fax / E-Mail: 49-4307-8295-222 / 49-4307-8295-14 / o.strauch@e-nema.de

2. Hazards identification

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS no.</th>
<th>Content</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heterorhabditis bacteriophora</td>
<td>NA</td>
<td>10 %</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Inert carrier</td>
<td>NA</td>
<td>90 %</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Primary routes of entry: eyes, oral

Exposure limit for dust (not formed during normal use): 0.06 µg/in³

No reportable quantities of toxic ingredients according to Section 313 SARA Title III and 40 CFR 372
Not classified according EEC Directives

Potential Acute Health Effects

**Eyes:** Irritation, itching, redness

**Skin:** Mild skin irritation

**Inhalation:** Respiratory system irritation (The formulation is free of dust. No inhalation expected.)

**Ingestion:** No effects
3. **Composition/information on ingredients**

   **Substances**

   *Active ingredient:*

   Name: *Heterorhabditis bacteriophora* (living organism, entomopathogen nematode) CAS-Nr.: Not available for living organisms

   *Inert carriers:*
   
   Contains no admixtures with labelling obligation. The formulation is confidential.

   **Mixtures**
   
   Not a mixture of active ingredients

4. **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.

5. **Fire-fighting measures**

   **Flammability**

   Flame resistant, not explosive

   **Extinguishing media**

   All fire extinguishing media are appropriate.

6. **Accidental release measure**

   **Personal precautions, protective equipment and emergency procedures**

   None

   **Environmental precautions**

   None

   **Methods and material for containment and cleaning up**

   Wear dusk mask, eye protection, cloves. Clean contaminated area mechanical and/or with water.
7. Handling and storage

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

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:
  Opened bags should be used up. Storage class: 13

8. Exposure controls/personal protection

Control parameters
  None

Personal protective equipment
  Eyes / face
  Protective glasses

Skinprotection
  Cloves

Respiratory protection
  Dusk mask
9. **Physical and chemical properties**

9.1 Information on basic physical and chemical properties

- **Physical state:** Powder
- **Colour:** Ochre
- **Odor:** Wet clay
- **pH:** 7-8 (100 g/L water, 20°C)
- **Oxidising compounds:** None
- **Freezing point:** 0 °C
- **Boiling point:** 100 °C
- **Solubility n-octanol/water:** NA
- **Explosive compounds:** None
- **Vapour pressure:** NA

10. **Chemical stability and reactivity**

   Not applicable, contains living organisms

11. **Toxicological information**

- **Acute toxicity**
  Not toxic or pathogenic to mice (oral, subcutan, intraperitoneal)

- **Skin corrosion/irritation**
  None

- **Serious eye damage/irritation**
  None

- **Irritation to respiratory tract**
  Unknown

- **Carcinogenicity/mutagenicity**
  Not applicable

12. **Ecological information**

- **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.

- **Persistence and degradability**
  Not applicable

- **Bioaccumulative potential**
  Not applicable

- **Mobility in the soil**
  Not applicable

- **Other adverse effect**
  Unknown
13. Disposal consideration

- **EPA Waste Number:** Non-hazardous waste
- **Product /Packaging disposal**
  Vacuum or manual, general trash / packaging waste

14. Transport information

- **D.O.T. Classification:** Not regulated
- **INO/IMDG:** Not regulated
- **IATA:** Not regulated

15. Regulatory Information

**US Federal Regulations**

**Product information**

The product in not considered hazardous

**SARA 311/312**

- Acute: No
- Chronic: No
- Fire: No
- Pressure: No
- Reactive: No

**SARA 313**

No reportable quantities of toxic substances according requirements of Section 313 of SARA III and 40 CFR 372

**TSCA listing**

Exempted