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

1.1. Product identifier
Product form: Mixture
Product name: NEMguard DE
Active Ingredient: Garlic concentrate
Type of formulation: Granule (GR)

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

2.1. Relevant identified uses
Main use category: Plant protection product for professional use. Agriculture.
Use of the substance/mixture: Nematicide

1.2.2. Uses advised against
No additional information available.

1.3. Details of the supplier of the safety data sheet

Supplier:
ECOspray Ltd
Grange Farm, Cockley Cley Road
Hilborough, Thetford
Norfolk IP26 5BT

Distributor:
Suite 5, 3 Riverside
Granta Park
Great Abingdon
Cambridgeshire CB21 6AD
United Kingdom
Tel: +44 (0)845 373 0305
Fax: +44 (0)1223 891210
Email: certis@certiseurope.co.uk
Website: www.certiseurope.co.uk

1.4. Emergency telephone number

Emergency number: Certis Carechem24 multilingual 24 hours emergency number: +44 (0) 870 190 6777.
For advice on medical emergencies, fires, spillages or chemical hazards only - phone: 0870 190 6777.
For further advice for medical professionals - The National Poisons Information Service:
Tel: 0870 600 6266 (UK only) or Dublin Tel: 0035 3 137 99 64/379966.
For further advice for veterinary surgeons: 020 7635 9195.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Skin Irrit. 2 H315
2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP): GHS07

Signal word (CLP): Warning

Hazard statements (CLP): H315 - Causes skin irritation

Precautionary statements (CLP):
- P102 - Keep out of reach of children
- P280 - Wear protective gloves/protective clothing/eye protection/face protection
- P302+P352 - IF ON SKIN: Wash with plenty of water
- P332+P313 - If skin irritation occurs: Get medical advice/attention
- P362+P364 - Take off contaminated clothing and wash it before reuse

EUH-statements:
- EUH208 – Contains garlic. May produce an allergic reaction.
- EUH401 - To avoid risks to human health and the environment, comply with the instructions for use.

2.3. Other hazards

No additional information available.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable.

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garlic concentrate</td>
<td>(CAS No) 8000-78-0</td>
<td>45</td>
<td>Skin Irrit. 2, H315</td>
</tr>
<tr>
<td></td>
<td>(EC no) 232-371-1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: In the event of any complaints or symptoms, avoid further exposure.

First-aid measures after inhalation: IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist call a doctor.

First-aid measures after skin contact: IF ON SKIN: Wash with plenty of soap and water. Remove contaminated clothing and shoes. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact: IF IN EYES: Rinse cautiously with water for at least 15 minutes, also under eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist.

First-aid measures after ingestion: IF SWALLOWED: Drink copious amounts of water.
4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries: Slight irritation.

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

Wash the exposed skin with water and soap. Drink plenty of water.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Water spray
- Dry chemical powder
- Alcohol resistant foam
- Carbon dioxide (CO₂).

Unsuitable extinguishing media: Water spray jet.

5.2. Special hazards arising from the substance or mixture

Product is non-flammable and non-combustible. Dangerous gases are evolved in the event of fire.

5.3. Advice for firefighters

Firefighting instructions: Exercise caution when fighting any chemical fire.
- Fight fire from safe distance and protected location.
- Do not breathe fumes
- Cool closed containers exposed to fire with water spray
- If possible, take the containers out of dangerous zone.
- Contain fire-fighting water with dikes or absorbents to prevent migration and entry into sewers, streams or groundwater.

Protection during firefighting: Wear suitable protective clothing, gloves, eye/face protection and respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Protective equipment: Wear suitable protective clothing, gloves and eye/face protection.

Emergency procedures: Evacuate area.
- Ensure adequate ventilation.
- Contain any spills with dikes or absorbents to prevent migration and entry into sewers, streams or groundwater.

6.2. Environmental precautions

Prevent entry to sewers and public waters.
Notify the authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Clean up any spills as soon as possible.
- Collect spilled material with shovels, buckets and place in closed containers and label properly.
- Remove as chemical waste, according to national or local legislation.
- In the event of major spillage: contact an expert.

6.4. Reference to other sections

See sections 7-8-13.
SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Do not leave product in applicator hoppers overnight.

Avoid contact with eyes, skin, nose and mouth.

Wear suitable protective clothing, gloves and eye/face protection.

Opened containers must be carefully closed and kept upright to avoid leakage.

Hygiene measures: Always wash your hands immediately after handling this product, and once again before leaving the workplace.

Contaminated work clothing should not be allowed out of the workplace.

Do not eat, drink or smoke when using this product.

Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Provide adequate ventilation.

Storage conditions: Prevent unauthorised access.

Keep locked up and out of the reach of children.

Keep in original containers, tightly closed.

Keep away from food, drink and animal feedingstuffs.

Protect against frost.

Keep away from heat and direct sunlight.

Maximum storage period: 24 months at room temperature.

7.3. Specific end use(s)

Nematicide for agricultural use. Refer to the label.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No occupational exposure limit value is known. See section 3 “Information on ingredients”.

8.2. Exposure controls


Materials for protective clothing: Chemical resistant protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Solid, granular

Colour: Dark brown.

Odour: Slightly garlic-like.

Odour threshold: No data available

pH: 5.9 - 6.9

Relative evaporation rate (butylacetate=1): No data available

Melting point: No data available
### Freezing point
- No data available

### Boiling point
- Not applicable

### Flash point
- No data available

### Auto-ignition temperature
- Does not ignite

### Decomposition temperature
- No data available

### Flammability (solid, gas)
- Non flammable.

### Vapour pressure
- Not applicable

### Relative vapour density at 20 °C
- No data available

### Relative density
- No data available

### Density
- 0.78 g/cm³

### Solubility
- Insoluble.

### Log Pow
- No data available

### Log Kow
- No data available

### Viscosity, kinematic
- Not applicable

### Viscosity, dynamic
- Not applicable

### Explosive properties
- Non explosive.

### Oxidising properties
- Does not ignite.

### Explosive limits
- No data available

### 9.2. Other information
- No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity
The product is stable at normal handling and storage conditions.

#### 10.2. Chemical stability
The product is stable at normal handling and storage conditions.

#### 10.3. Possibility of hazardous reactions
Is not explosive and does not exhibit oxidant properties.

#### 10.4. Conditions to avoid
Extremes of temperature and direct sunlight.

#### 10.5. Incompatible materials
Store only in the original container.

#### 10.6. Hazardous decomposition products
Combustion or thermal decomposition may generate toxic vapours: chlorine compounds, nitrogen oxides, carbon monoxide, hydrocarbons.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects
- Acute toxicity: Not classified
- Irritation: Causes skin irritation
  - No eye irritation (rabbit)
- Corrosivity: Not classified
- Sensitisation: Non-sensitising (rabbit)
- Repeated dose toxicity: Not classified
- Carcinogenicity: Not classified
- Mutagenicity: Not classified
- Toxicity for reproduction: Not classified
SECTION 12: Ecological information

12.1. Toxicty

NeMguard

<table>
<thead>
<tr>
<th>Compound</th>
<th>EC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC50 Daphnia</td>
<td>9.3 mg a.s/l (48h)</td>
</tr>
<tr>
<td>EC50 Algae</td>
<td>19.64 mg a.s/l (96h)</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
The single components are biologically degradable.

12.3. Bioaccumulative potential
Does not bioaccumulate.

12.4. Mobility in soil
No additional information available.

12.5. Results of PBT and vPvB assessment
This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
This mixture contains no substance considered to be very persistent and very bioaccumulative (vPvB).

12.6. Other adverse effects
No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste treatment methods : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

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

14.1. UN number
Not regulated for transport

14.2. UN proper shipping name
Not applicable

14.3. Transport hazard class(es)
Not applicable

14.4. Packing group
Not applicable

14.5. Environmental hazards
Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport
No additional information available

14.6.2. Transport by sea
No additional information available

14.6.3. Air transport
No additional information available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 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
Contains no REACH candidate substance

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

<table>
<thead>
<tr>
<th>H315</th>
<th>Skin corrosion/irritation, Category 2</th>
</tr>
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<tr>
<td>EUH208</td>
<td>Contains . May produce an allergic reaction</td>
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<td>To avoid risks to human health and the environment, comply with the instructions for use</td>
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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.