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

- **1.1 Product identifier**
  - Trade name: CERETAN® M 82
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
  - No further relevant information available.
- **Application of the substance / the mixture Additive**
- **1.3 Details of the supplier of the safety data sheet**
  - Manufacturer/Supplier: MÜNZING Micro Technologies GmbH
  - Dr.-Bergius-Straße 16-24
  - 06729 Elsterauß, Germany
  - E-Mail: ceretan@munzing.com
  - Tel.: +49 3441 829 10-22
- **Further information obtainable from:**
  - Product Safety Department
  - E-mail (MSDS): mds@munzing.com
- **1.4 Emergency telephone number:** For Chemical Emergencies: CHEMTREC: +1 703 741 5970

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
  - Classification according to Regulation (EC) No 1272/2008
    - The product is not classified as hazardous, according to the CLP regulation.
- **2.2 Label elements**
  - Labelling according to Regulation (EC) No 1272/2008 Void
  - Hazard pictograms Void
  - Signal word Void
  - Hazard statements Void
- **2.3 Other hazards**
  - Risk of dust explosion
  - Results of PBT and vPvB assessment Not applicable.
  - PBT: None.
  - vPvB: None.

**SECTION 3: Composition/information on ingredients**

- **3.2 Chemical characterisation:** Mixtures
- **Description:** refined montanester wax, partially saponified
- **Dangerous components:** Void

**SECTION 4: First aid measures**

- **4.1 Description of first aid measures**
  - General information: No special measures required.
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Immediately wash with water and soap and rinse thoroughly.
  - After eye contact:
    - Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  - After swallowing: If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**
  - No further relevant information available.

(Contd. on page 2)
7.3 Specific end use(s)  
No further relevant information available.
SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters

- Ingredients with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

- Personal protective equipment:

  - General protective and hygienic measures:
  Avoid contact with the eyes and skin.
  The usual precautionary measures are to be adhered to when handling chemicals.
  Do not inhale dust / smoke / mist.
  
  - Respiratory protection:
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

- Protection of hands:
  Only use chemical-protective gloves with CE-labelling of category III.
  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- Material of gloves
  Nitrile rubber, NBR
  Recommended thickness of the material: ≥ 0.4 mm
  The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- Penetration time of glove material
  The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Eye protection: Safety glasses

- Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- General Information

  - Appearance:
    - Form: Powder
    - Colour: Light yellow
    - Odour: Specific type
    - Odour threshold: Not determined.

  - pH-value: Not applicable.

- Change in condition

  - Melting point/freezing point: > 90 °C
  - Initial boiling point and boiling range: Undetermined.

- Flash point: > 230 °C

- Flammability (solid, gas): Product is not flammable.
Safety data sheet
according to 1907/2006/EC, Article 31

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<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignition temperature:</td>
<td>&gt; 200 °C</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Auto-ignition temperature:</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Explosive properties:</td>
<td>Product is not explosive.</td>
</tr>
<tr>
<td></td>
<td>However, formation of</td>
</tr>
<tr>
<td></td>
<td>explosive dust/vapour</td>
</tr>
<tr>
<td></td>
<td>mixtures are possible.</td>
</tr>
<tr>
<td>Explosion limits:</td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Upper</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>None.</td>
</tr>
<tr>
<td>Vapour pressure:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Density:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Relative density</td>
<td>≈ 1 g/cm³</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with water</td>
<td>Insoluble.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity:</td>
<td></td>
</tr>
<tr>
<td>Dynamic</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Solvent content:</td>
<td></td>
</tr>
<tr>
<td>Solids content:</td>
<td>≈ 100 %</td>
</tr>
<tr>
<td>9.2 Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

SECTION 10: Stability and reactivity

10.1 Reactivity
No further relevant information available.

10.2 Chemical stability

10.3 Possibility of hazardous reactions
Risk of dust explosion.

10.4 Conditions to avoid
No further relevant information available.

10.5 Incompatible materials
No further relevant information available.

10.6 Hazardous decomposition products
No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

11.2 Acute toxicity
Based on available data, the classification criteria are not met.

11.3 LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50/LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>&gt;20,000 mg/kg (mouse)</td>
</tr>
</tbody>
</table>

11.4 Primary irritant effect:

11.5 Skin corrosion/irritation
Based on available data, the classification criteria are not met.

11.6 Serious eye damage/irritation
Based on available data, the classification criteria are not met.

11.7 Respiratory or skin sensitisation
Based on available data, the classification criteria are not met.

(Contd. on page 5)
· CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
  · Germ cell mutagenicity Based on available data, the classification criteria are not met.
  · Carcinogenicity Based on available data, the classification criteria are not met.
  · Reproductive toxicity Based on available data, the classification criteria are not met.
  · STOT-single exposure Based on available data, the classification criteria are not met.
  · STOT-repeated exposure Based on available data, the classification criteria are not met.
  · Aspiration hazard Based on available data, the classification criteria are not met.

· 12.1 Toxicity
  · Aquatic toxicity:
    
    | EC50 | >100 mg/l (alga) (green alga / 72 h, OECD 201) |
    | NOEC | 1,000 mg/l (worm) (Eisenia fetida / 14 d, OECD 207) |

· 12.2 Persistence and degradability No further relevant information available.
  · 12.3 Bioaccumulative potential No further relevant information available.
  · 12.4 Mobility in soil No further relevant information available.
  · Ecotoxicological effects:
    · Behaviour in sewage processing plants:
      Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations. Do not release untreated into natural waters.
    · Additional ecological information:
      · General notes: Not hazardous for water.

· 12.5 Results of PBT and vPvB assessment
  According to Annex XIV of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria. Self classification.

· 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods
  · Recommendation
    Must not be disposed together with household garbage. Do not allow product to reach sewage system.

§ European waste catalogue

| 16 03 06 | organic wastes other than those mentioned in 16 03 05 |

· Uncleaned packaging:
  · Recommendation: Disposal must be made according to official regulations.
  · Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· 14.1 UN-Number
  · ADR/RID/ADN, ADN, IMDG, IATA Void

· 14.2 UN proper shipping name
  · ADR/RID/ADN, ADN, IMDG, IATA Void

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- 14.3 Transport hazard class(es)
  - ADR/RID/ADN, ADN, IMDG, IATA
  - Class: Void

- 14.4 Packing group
  - ADR/RID/ADN, IMDG, IATA
  - Void

- 14.5 Environmental hazards:
  - Marine pollutant:
  - No

- 14.6 Special precautions for user
  - Not applicable.

- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
  - Not applicable.

- Transport/Additional information:
  - Not a dangerous good to the above specifications.

- UN "Model Regulation":
  - Void

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Directive 2012/18/EU
  - Named dangerous substances - ANNEX I None of the ingredients is listed.
  - National regulations:
  - Water hazard class: Not hazardous for water.

- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing SDS:
  - Product Safety Department
  - E-Mail: msds@munzing.com

- Abbreviations and acronyms:
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - IATA: International Air Transport Association
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - ELINCS: European List of Notified Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative

GB