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

- **1.1 Product identifier**
  - Trade name: CERETAN® T 91
  - CAS Number: 8002-74-2
  - EC number: 232-315-6
  - Registration number 01-2119488076-30

- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
  - No further relevant information available.

- **1.3 Details of the supplier of the safety data sheet**
  - Manufacturer/Supplier: MÜNZING Micro Technologies GmbH
    - Dr.-Bergius-Straße 16-24
    - 06729 Elsterau, Germany
    - E-Mail: ceretan@munzing.com
    - Tel.: +49 3441 829 10-22

- **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 substance is not classified, 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
  - Additional information:
    - Safety data sheet available on request.

- **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**

- **CAS No. Description**
  - 8002-74-2 Paraffin waxes and Hydrocarbon waxes
  - Identification number(s)
  - EC number: 232-315-6

**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.

(Contd. on page 2)
Keep ignition sources away - Do not smoke.

Keep away from heat and direct sunlight.

In case of fire, the following can be released:

- Carbon monoxide (CO)
- Nitrogen oxides (NOx)

Use fire extinguishing methods suitable to surrounding conditions.

According to 1907/2006/EC, Article 31

6.1 Personal precautions, protective equipment and emergency procedures
Avoid formation of dust.
Use respiratory protective device against the effects of fumes/dust/aerosol.
Wear protective clothing.
Particular danger of slipping on leaked/spilled product.

6.2 Environmental precautions: No special measures required.

6.3 Methods and material for containment and cleaning up: Pick up mechanically.

6.4 Reference to other sections
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7.1 Precautions for safe handling
Keep away from heat and direct sunlight.
Prevent formation of dust.
Ensure good ventilation/exhaustion at the workplace.

Information about fire - and explosion protection:
Protect against electrostatic charges.
Dust can combine with air to form an explosive mixture.
Keep ignition sources away - Do not smoke.

(Contd. on page 3)
Trade name: CERETAN® T 91

7.2 Conditions for safe storage, including any incompatibilities
- Storage:
  - Requirements to be met by storerooms and receptacles: Store in a cool location.
  - Information about storage in one common storage facility: Store away from oxidising agents.
- Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.

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.

CAS: 8002-74-2 Paraffin waxes and Hydrocarbon waxes

<table>
<thead>
<tr>
<th>WEL</th>
<th>Short-term value: 6 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Long-term value: 2 mg/m³</td>
</tr>
</tbody>
</table>

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

8.2 Exposure controls
- Personal protective equipment:
  - General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals. Do not inhale dust / smoke / mist. Avoid contact with the eyes and skin.
  - 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. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
  - 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.
  - Penetration time of glove material
    The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended. 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

(Contd. on page 4)
SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
  - General Information
    - Appearance: Powder
    - Colour: White
    - Odour: Specific type
    - Odour threshold: Not determined.
  - pH-value: Not applicable.
  - Change in condition
    - Melting point/freeze point: Undetermined.
    - Initial boiling point and boiling range: Undetermined.
    - Drip point: ≈116 °C (DGF M-III 3)
  - Flash point: > 200 °C (DIN EN ISO 2719)
  - Flammability (solid, gas): Product is not flammable.
  - Ignition temperature: > 350 °C
  - Decomposition temperature: > 250 °C
  - Auto-ignition temperature: Product is not selfigniting.
  - Explosive properties: Product is not explosive. However, formation of explosive dust/vapour mixtures are possible.
  - Explosion limits:
    - Lower: Not determined.
    - Upper: Not determined.
  - Oxidising properties
    - Not applicable.
  - Vapour pressure: Not applicable.
  - Density at 23 °C:
    - ≈0.95 g/cm³ (DIN EN ISO 1183)
  - Relative density: < 1 g/cm³
  - Vapour density: Not applicable.
  - Evaporation rate: Not applicable.
  - Solubility in / Miscibility with water: Insoluble.
  - Partition coefficient: n-octanol/water: Not determined.
  - Viscosity:
    - Dynamic: Not applicable.
  - Solids content: 100.0 %

SECTION 10: Stability and reactivity

- 10.1 Reactivity: No further relevant information available.
- 10.2 Chemical stability
  - Thermal decomposition / conditions to be avoided:
    - No decomposition if used and stored according to specifications.
  - 10.3 Possibility of hazardous reactions: Risk of dust explosion.
  - 10.4 Conditions to avoid: No further relevant information available.
SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity: Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>CAS</th>
<th>Paraffin waxes and Hydrocarbon waxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
<td>&gt;5,000 mg/kg (rat)</td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - Skin corrosion/irritation: Based on available data, the classification criteria are not met.
  - Serious eye damage/irritation: Based on available data, the classification criteria are not met.
  - Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
  - CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): Based on available data, the classification criteria are not met.
  - 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.

SECTION 12: Ecological information

12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability: Easily eliminable from water.
- Bioaccumulative potential: No further relevant information available.
- 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
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.12.2018
Version number 1
Revision: 10.04.2018

Trade name: CERETAN® T 91

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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

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 Substance is not listed.
National regulations:
Waterhazard 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

(Contd. on page 7)
Trade name: CERETAN® T 91

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (division of the American Chemical Society)</td>
</tr>
<tr>
<td>LC50</td>
<td>Lethal concentration, 50 percent</td>
</tr>
<tr>
<td>LD50</td>
<td>Lethal dose, 50 percent</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>vPvB</td>
<td>very Persistent and very Bioaccumulative</td>
</tr>
</tbody>
</table>

(Contd. of page 6)