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

1.1 Product identifier
· Trade name: CERETAN® MXD 3920

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 Elsterbrücke, 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
  · Additional information:
    Safety data sheet available on request.

2.3 Other hazards
· Results of PBT and vPvB assessment Not applicable.
· PBT: None.
· vPvB: None.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures
· Description: micronized wax preparation with coating of diamond-like hardness

<table>
<thead>
<tr>
<th>Dangerous components:</th>
<th>CAS: 1344-28-1</th>
<th>EINECS: 215-691-6</th>
<th>Reg.nr.: 01-2119529248-35</th>
<th>aluminium oxide</th>
<th>substance with a workplace exposure limit 10-20%</th>
</tr>
</thead>
</table>

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.
7.3 Specific end use(s)
No further relevant information available.

(Contd. on page 3)
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:

<table>
<thead>
<tr>
<th>CAS:</th>
<th>1344-28-1 aluminium oxide</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL</td>
<td>Long-term value: <strong>1</strong></td>
</tr>
<tr>
<td></td>
<td><em>inhaleable dust</em>*</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:

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:

<table>
<thead>
<tr>
<th>Form:</th>
<th>Powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour:</td>
<td>White</td>
</tr>
<tr>
<td>Odour:</td>
<td>Specific type</td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

· pH-value: Not applicable.

· Change in condition

<table>
<thead>
<tr>
<th>Melting point/freezing point:</th>
<th>Undetermined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>Undetermined</td>
</tr>
<tr>
<td>Drip point:</td>
<td>≈ 142 °C (DGF M-III 3)</td>
</tr>
</tbody>
</table>

(Contd. on page 4)
### Safety data sheet

**according to 1907/2006/EC, Article 31**

**Printing date:** 22.01.2020  
**Version number:** 2  
**Revision:** 24.07.2019

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**Trade name:** CERETAN® MXD 3920

(Contd. of page 3)

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flash point:</strong></td>
<td>&gt; 200 °C</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas):</strong></td>
<td>Product is not flammable.</td>
</tr>
<tr>
<td><strong>Decomposition temperature:</strong></td>
<td>&gt; 230 °C</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature:</strong></td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td><strong>Explosive properties:</strong></td>
<td>Product is not explosive. However, formation of explosive dust/vapour mixtures are possible.</td>
</tr>
<tr>
<td><strong>Explosion limits:</strong></td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Upper</td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Oxidising properties</strong></td>
<td>None.</td>
</tr>
<tr>
<td><strong>Vapour pressure:</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Density:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Bulk density:</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td>≈ 0.3 g/cm³</td>
<td></td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td>&lt; 1 g/cm³ (wax)</td>
<td></td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with water:</strong></td>
<td>Insoluble.</td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water:</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Dynamic:</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Solids content:</strong></td>
<td>≈ 100 %</td>
</tr>
<tr>
<td><strong>9.2 Other information</strong></td>
<td>ST-class = 2</td>
</tr>
</tbody>
</table>

---

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

<table>
<thead>
<tr>
<th><strong>LD/LC50 values relevant for classification:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAS:</strong> 1344-28-1 aluminium oxide</td>
</tr>
<tr>
<td><strong>Oral LD50:</strong> &gt;15,900 mg/kg (rat)</td>
</tr>
</tbody>
</table>

(Contd. on page 5)
**Trade name: CERETAN® MXD 3920**

(Contd. of page 4)

- **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)**
- **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.
- **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.

<table>
<thead>
<tr>
<th>16 03 06</th>
<th><strong>organic wastes other than those mentioned in 16 03 05</strong></th>
</tr>
</thead>
</table>

- **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

(Contd. on page 6)
Trade name: CERETAN® MXD 3920

<table>
<thead>
<tr>
<th>14.3 Transport hazard class(es)</th>
<th>Void</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.4 Packing group</td>
<td>Void</td>
</tr>
<tr>
<td>14.5 Environmental hazards:</td>
<td>No</td>
</tr>
<tr>
<td>14.6 Special precautions for user</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Transport/Additional information:</td>
<td>Not a dangerous good to the above specifications.</td>
</tr>
<tr>
<td>UN &quot;Model Regulation&quot;:</td>
<td>Void</td>
</tr>
</tbody>
</table>

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:
  - 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
- 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

* Data compared to the previous version altered.