**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.
  - 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 Elsteraue, Germany
    E-Mail: ceretan@munzing.com
    Tel.: +49 3441 829 10-22

- **Further information obtainable from:**
  - Product Safety Department
  - E-mail (MSDS): msds@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, 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**

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

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

(Contd. on page 2)
7.3 Specific end use(s)

7.2 Conditions for safe storage, including any incompatibilities

7.1 Precautions for safe handling

6.4 Reference to other sections

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

6.2 Environmental precautions: No special measures required.

6.1 Personal precautions, protective equipment and emergency procedures

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

No dangerous substances are released.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

SECTION 5: Firefighting measures

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released:

- Carbon monoxide (CO)

5.3 Advice for firefighters

Protective equipment: Do not inhale explosion gases or combustion gases.

Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 7: Handling and storage

- Protective equipment: Water with full jet

5.2 Special hazards arising from the substance or mixture

- Suitable extinguishing agents: CO2, powder or water spray. Fight larger fire with alcohol resistant foam.

5.1 Extinguishing media

- Particular danger of slipping on leaked/spilled product.

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released:

- Carbon monoxide (CO)

5.3 Advice for firefighters

Protective equipment: Do not inhale explosion gases or combustion gases.

Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 5: Firefighting measures

- No dangerous substances are released.

- No further relevant information available.

- See Section 13 for disposal information.

- See Section 7 for information on safe handling.

- Use respiratory protective device against the effects of fumes/dust/aerosol.

- Avoid formation of dust.

- Particular danger of slipping on leaked/spilled product.

- Pick up mechanically.

- See Section 8 for information on personal protection equipment.

- No further relevant information available.

- See Section 7 for information on safe handling.

- Ensure good ventilation/exhaustion at the workplace.

- Protect against electrostatic charges.

- Dust can combine with air to form an explosive mixture.

- Keep ignition sources away - Do not smoke.

- In case of fire, the following can be released:

- Carbon monoxide (CO)

- No dangerous substances are released.

- No further relevant information available.

- See Section 7 for information on safe handling.

- Prevent formation of dust.

- Ensure good ventilation/exhaustion at the workplace.

- Protect against electrostatic charges.

- Dust can combine with air to form an explosive mixture.

- Keep ignition sources away - Do not smoke.
SECTION 8: Exposure controls/personal protection

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

<table>
<thead>
<tr>
<th>Ingredients with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 1344-28-1 aluminium oxide</td>
</tr>
<tr>
<td>WEL: Long-term value: [10^* 4** \text{mg/m}^3]</td>
</tr>
</tbody>
</table>
* inhalable dust **respirable dust

- 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: \[\geq 0.4 \text{mm}\]
  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

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

<table>
<thead>
<tr>
<th>pH-value:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Change in condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/freezing point: Undetermined.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range: Undetermined.</td>
</tr>
<tr>
<td>Drip point: [\approx 142^\circ \text{C (DGF M-III 3)}]</td>
</tr>
</tbody>
</table>
Based on available data, the classification criteria are not met.

Explosive properties: Product is not explosive. However, formation of explosive dust/vapour mixtures are possible.

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:

CAS: 1344-28-1 aluminium oxide
Oral LD50 >15,900 mg/kg (rat)
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>European waste catalogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 03 06</td>
</tr>
</tbody>
</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
Trade name: CERETAN® MXD 3920

(Contd. of page 5)

· **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

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**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.

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**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.*