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

1.1 Product identifier
- Trade name: CERETAN® MO 3220

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:
  MUNZING 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): 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: polar, oxidized polyethylene wax
- 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)
Trade name: CERETAN® MO 3220

· 4.3 Indication of any immediate medical attention and special treatment needed
   No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media
   Suitable extinguishing agents: CO2, powder or water spray. Fight larger fire with alcohol resistant foam.
   For safety reasons unsuitable extinguishing agents: Water with full jet

· 5.2 Special hazards arising from the substance or mixture
   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)
   Nitrogen oxides (NOx)

· 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 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures
   Avoid formation of dust.
   Use respiratory protective device against the effects of fumes/dust/aerosol.
   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.

SECTION 7: Handling and storage

· 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.

· 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.
- **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:** White
  - **Odour:** Specific type
  - **Odour threshold:** Not determined.
- **pH-value:** Not applicable.
- **Change in condition**
  - **Melting point/freezing point:** > 100 °C
  - **Initial boiling point and boiling range:** Undetermined.
  - **Drip point:** ≈ 108 °C (DGF M-III 3)
- **Flash point:** > 100 °C
- **Flammability (solid, gas):** Product is not flammable.
### Trade name: CERETAN® MO 3220

(Contd. of page 3)

- **Ignition temperature:** > 200 °C
- **Decomposition temperature:** Not determined.
- **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:** None.
- **Vapour pressure:** Not applicable.
- **Density at 20 °C:** ≈ 0.95 g/cm³ (DIN EN ISO 1183)
- **Relative density:** ≈ 0.95 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.
- **Solvent content:**
  - **Solids content:** ≈ 100 %
  - **9.2 Other information**: ST-class = 1

### 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.
- **LD/LC50 values relevant for classification:**
  - Oral LD50 >15,000 mg/kg (rat)
- **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.
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.01.2020
Version number 1
Revision: 16.08.2018

Trade name: CERETAN® MO 3220

- 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.
  - 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 cleaning 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

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

(Contd. of page 4)
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date: 22.01.2020
Version number: 1
Revision: 16.08.2018

Trade name: CERETAN® MO 3220

(Contd. of page 5)

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