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

1.1 Product identifier

Trade name: AGITAN® E 255

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

Defoamers, Anti-foaming agent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

MÜNZING CHEMIE GmbH
Münzingstrasse 2
74232 Abstatt, Germany
E-Mail: info@munzing.com
Tel.: +49 7131 987-100

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
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.

Signal word Void

Hazard statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

Contains Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1), 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: None.
vPvB: None.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Emulsion of organo-modified polysiloxanes

(Contd. on page 2)
Dangerous components:

<table>
<thead>
<tr>
<th>CAS: 9005-00-9</th>
<th>Stearyl alcohol, ethoxylated</th>
<th>1-%&lt;br&gt;(&lt;3%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NLP: 500-017-8</td>
<td>Aquatic Chronic 2, H411</td>
<td></td>
</tr>
<tr>
<td>Reg.nr.: 01-2119977092-34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 55965-84-9</th>
<th>Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)</th>
<th>&lt;0.0015%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC number: 611-341-5</td>
<td>Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 2, H330; Skin Corr. 1B, H314; Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100); Skin Sens. 1, H317</td>
<td></td>
</tr>
<tr>
<td>Reg.nr.: 01-2120764691-48</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Immediately remove any clothing soiled by the product.

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.

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 fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture

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 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing.

6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
  No special precautions are necessary if used correctly.
  Information about fire - and explosion protection: Protect from heat.

- 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: Not required.
  Further information about storage conditions:
  Protect from frost.
  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.

<table>
<thead>
<tr>
<th>CAS: 9005-00-9 Stearyl alcohol, ethoxylated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral consumer, long-term exposure, systemic effects</td>
</tr>
<tr>
<td>Dermal worker, long-term exposure, systemic effects</td>
</tr>
<tr>
<td>Inhalative worker, long-term exposure, systemic effects</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

- PNECs
  CAS: 9005-00-9 Stearyl alcohol, ethoxylated

| fresh water | 0.0019 mg/l (not specified) |
| marine water | 0.0019 mg/l (not specified) |
| aqua - intermittent release | 0.1 mg/l (not specified) |
| sediment (fresh water) | 81.1 mg/kg (not specified) |
| sediment (marine water) | 81.1 mg/kg (not specified) |
| sewage treatment plant | 1.4 mg/l (not specified) |

- 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.
  Avoid contact with the eyes and skin.
  Do not inhale gases / fumes / aerosols.
  Respiratory protection: Use suitable respiratory protective device only when aerosol or mist is formed.
  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
  - Natural rubber, NR

Recommended thickness of the material: ≥ 0.5 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**
  For the mixture of chemicals mentioned below the penetration time has to be at least 480 minutes (Permeation according to EN 16523-1:2015: Level 6).

The determined penetration times according to EN 16523-1:2015 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

### SECTION 9: Physical and chemical properties

**9.1 Information on basic physical and chemical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>Form</td>
<td>Fluid</td>
</tr>
<tr>
<td>Colour</td>
<td>White</td>
</tr>
<tr>
<td>Odour</td>
<td>Weak, characteristic</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>pH-value (20 g/l) at 20 °C</strong></td>
<td>≈ 8 (DIN ISO 976)</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Undetermined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>≈ 100 °C</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Ignition temperature</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>Product is not selfigniting</td>
</tr>
<tr>
<td><strong>Explosion properties</strong></td>
<td>Product does not present an explosion hazard.</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 determined</td>
</tr>
<tr>
<td><strong>Density at 20 °C</strong></td>
<td>≈ 1.0 g/cm³ (DIN EN ISO 2811-1)</td>
</tr>
</tbody>
</table>
Relative density: Not determined.
Vapour density: Not determined.
Evaporation rate: Not determined.
Solubility in / Miscibility with water: Fully miscible.
Partition coefficient: n-octanol/water: Not determined.
Viscosity: Dynamic at 25 °C: ≈ 180 mPas (DIN EN ISO 3219)
Solvent content:
9.2 Other information
No further relevant information available.

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 according to specifications.
10.3 Possibility of hazardous reactions
No dangerous reactions known.
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:
CAS: 9005-00-9 Stearyl alcohol, ethoxylated
<table>
<thead>
<tr>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>LD50 &gt;5,000 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>NOAEL ≥500 mg/kg (rat)</td>
</tr>
<tr>
<td></td>
<td>LD50 &gt;2,000 mg/kg (rat)</td>
</tr>
</tbody>
</table>
CAS: 55965-84-9 Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)
<table>
<thead>
<tr>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>LD50 49.6-75 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>LD50 141 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Inhalative</td>
<td>LC50/4h 0.33 mg/l (rat) (Aerosol)</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)
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.
**SECTION 12: Ecological information**

**12.1 Toxicity**

- **Aquatic toxicity:**
  - **CAS: 9005-00-9 Stearyl alcohol, ethoxylated**
    - EC50 140 mg/l (sludge) (3h)
    - EC20 0.0542 mg/l (daphnia) (Daphnia magna, 21d (SAR/AAR))
    - LC50 108 mg/l (fish) (Danio rerio, 96h (OECD 203))
    - EL50 51 mg/l (daphnia) (Daphnia magna, 48h (OECD 202))
    - NOEC 0.77 mg/l (daphnia) (Daphnia magna, 21d)
    - >0.33 mg/l (fish) (Lepomis macrochirus, 30d)
  - **CAS: 55965-84-9 Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)**
    - EC50 0.018 mg/l (alga) (Pseudokirchneriella subcapitata / 72 h)
    - 4.5 mg/l (bacteria) (activated sludge)
    - 0.16 mg/l (daphnia) (Daphnia magna / 48 h)
    - LC50 0.19 mg/l (fish) (Oncorhynchus mykiss / 96 h)

**12.2 Persistence and degradability** Not easily biodegradable

**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:**
    - Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
    - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
  - **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 fullfilling 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**
  - 07 02 17 waste containing silicones other than those mentioned in 07 02 16

- **Uncleaned packaging:**
  - **Recommendation:** Disposal must be made according to official regulations.
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

- **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.
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
  - National regulations:
    - Waterhazard class: Water hazard class 1 (German AwSV, Self-assessment): slightly 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.

- **Relevant phrases**
  - H301 Toxic if swallowed.
  - H311 Toxic in contact with skin.
  - H314 Causes severe skin burns and eye damage.
  - H317 May cause an allergic skin reaction.
  - H330 Fatal if inhaled.
  - H400 Very toxic to aquatic life.
  - H410 Very toxic to aquatic life with long lasting effects.
  - H411 Toxic to aquatic life with long lasting effects.
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)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 3: Acute toxicity - oral – Category 3
Acute Tox. 2: Acute toxicity - inhalation – Category 2
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Sens. 1: Skin sensitisation – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

* Data compared to the previous version altered.