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

- **1.1 Product identifier**
  - Trade name: AGITAN® DF 6054

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

- **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**
    - 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.
  - **Hazard pictograms** Void
  - **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). 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:** Aqueous emulsion of silicones and surfactants.

<table>
<thead>
<tr>
<th>CAS: 9005-00-9</th>
<th>Stearyl alcohol, ethoxylated</th>
</tr>
</thead>
<tbody>
<tr>
<td>NLP: 500-017-8</td>
<td>Aquatic Acute 1, H400; Aquatic Chronic 2, H411</td>
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<tr>
<td>Reg.nr.: 01-2119977092-34</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 52-51-7</th>
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</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 200-143-0</td>
<td></td>
</tr>
<tr>
<td>Reg.nr.: 01-2119980938-15</td>
<td></td>
</tr>
</tbody>
</table>

(Contd. on page 2)
SECTION 4: First aid measures

- 4.1 Description of first aid measures
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Generally the product does not irritate the skin.
  - After eye contact: Rinse opened eye for several minutes under running water.
  - 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: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
  - Protective equipment: Do not inhale explosion gases or combustion gases.
- 5.4 Additional information
  - Product contains water and is non-combustible.
  - 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.
  - Use respiratory protective device against the effects of fumes/dust/aerosol.
- 6.2 Environmental precautions:
  - Inform respective authorities in case of seepage into water course or sewage system.
  - Dilute with plenty of water.
  - 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
  - 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 No special precautions are necessary if used correctly.
  - Information about fire - and explosion protection: The product is not flammable.
- 7.2 Conditions for safe storage, including any incompatibilities
  - Storage:
  - Requirements to be met by storerooms and receptacles: No special requirements.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions: Protect from frost.

(Contd. of page 1)
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.

- DNELs

<table>
<thead>
<tr>
<th>CAS: 9005-00-9 Stearyl alcohol, ethoxylated</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral consumer, long-term exposure, systemic effects</td>
<td>25 mg/kg bw/day (human)</td>
</tr>
<tr>
<td>Dermal worker, long-term exposure, systemic effects</td>
<td>2,080 mg/kg bw/day (human)</td>
</tr>
<tr>
<td>Dermal consumer, long-term exposure, systemic effects</td>
<td>1,250 mg/kg bw/day (human)</td>
</tr>
<tr>
<td>Inhalative worker, long-term exposure, systemic effects</td>
<td>294 mg/m³ (human)</td>
</tr>
<tr>
<td>Inhalative consumer, long-term exposure, local effects</td>
<td>87 mg/m³ (human)</td>
</tr>
</tbody>
</table>

- PNECs

<table>
<thead>
<tr>
<th>CAS: 9005-00-9 Stearyl alcohol, ethoxylated</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>fresh water</td>
<td>0.0019 mg/l (not specified)</td>
</tr>
<tr>
<td>marine water</td>
<td>0.0019 mg/l (not specified)</td>
</tr>
<tr>
<td>sediment (fresh water)</td>
<td>81.1 mg/kg (not specified)</td>
</tr>
<tr>
<td>sediment (marine water)</td>
<td>81.1 mg/kg (not specified)</td>
</tr>
<tr>
<td>sewage treatment plant</td>
<td>1.4 mg/l (not specified)</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: Wash hands before breaks and at the end of work.
  - 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.

  Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

  Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- Material of gloves
  
  Nitrile rubber, NBR
  Butyl rubber, BR
  Neoprene gloves

  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 374 Part 3: Level 6).
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 breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Goggles recommended during refilling
- **Body protection:** Protective work clothing

### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance:** Fluid
  - **Colour:** White
  - **Odour:** Mild
  - **Odour threshold:** Not determined.

- **pH-value at 20 °C:** ≈ 7 (DIN ISO 976)

- **Change in condition**
  - **Melting point/freezing point:** Undetermined.
  - **Initial boiling point and boiling range:** Undetermined.

- **Flash point:** > 100 °C (DIN EN ISO 2719)

- **Flammability (solid, gas):** Not applicable.

- **Ignition temperature:** Not determined.

- **Decomposition temperature:** Not determined.

- **Auto-ignition temperature:** Product is not selfigniting.

- **Explosive properties:** Product does not present an explosion hazard.

- **Explosion limits:**
  - **Lower:** Not determined.
  - **Upper:** Not determined.
  - **Oxidising properties**
    - None.

- **Vapour pressure:** Not determined.

- **Density at 20 °C:** ≈ 1.0 g/cm³ (DIN EN ISO 2811-1)
  - **Relative density** Not determined.
  - **Vapour density** Not determined.
  - **Evaporation rate** Not determined.

- **Solubility in / Miscibility with water:** Emulsifiable.

- **Partition coefficient: n-octanol/water:** Not determined.

- **Viscosity:**
  - **Dynamic at 20 °C:** < 700 mPas (DIN EN ISO 3219)
    - **Kinematic:** Not determined.

- **Solvent separation test:** ≤3%

- **Solvent content:**
  - **Water:** ≈ 80%
Based on available data, the classification criteria are not met.

**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.

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<td>Dermal LD50</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.
  - **Aspiration hazard** 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 |
    |---------------------------------------------|
    | LC50 | 5.6 mg/l (fish) (Oncorhynchus mykiss / 96 h) |

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<td>EC50</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>LC50</td>
</tr>
</tbody>
</table>

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
Toxic for aquatic organisms. Do not release untreated into natural waters.

According to the criteria of the EU-classification and labelling “dangerous for environment” (93/21/EWG) the product has to be classified as non-hazardous for the environment. Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

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 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

#### 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

(Contd. of page 5)
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: AGITAN® DF 6054

(Contd. of page 6)

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 2 (Self-assessment): 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
  - H302 Harmful if swallowed.
  - H312 Harmful in contact with skin.
  - H315 Causes skin irritation.
  - H318 Causes serious eye damage.
  - H335 May cause respiratory irritation.
  - H400 Very toxic to aquatic life.
  - 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. 4: Acute toxicity – Category 4
  - Skin Irrit. 2: Skin corrosion/irritation – Category 2
  - Eye Dam. 1: Serious eye damage/eye irritation – Category 1
  - STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
  - Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
  - Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

(Contd. on page 8)
Trade name: **AGITAN® DF 6054**

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

* Data compared to the previous version altered.