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

1.1 Product identifier

Trade name: AGITAN® DF 6002

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
Münzingsstrasse 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

Eye Dam. 1 H318 Causes serious eye damage.

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

GHS05

Signal word Danger

Hazard-determining components of labelling:
Alcohols, C12-15, ethoxylated

Hazard statements

H318 Causes serious eye damage.

Precautionary statements

P280 Wear eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: None.

vPvB: None.
Saftey data sheet
according to 1907/2006/EC, Article 31

Trade name: AGITAN® DF 6002

(Contd. of page 1)

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixture**
- **Description:**
  Mixture of substances listed below with nonhazardous additions.
  hydrocarbons
  non-ionic emulsifiers

| CAS: 64742-56-9 | Distillates (petroleum), solvent-dewaxed light paraffinic |
| CAS: 265-159-2 | Asp. Tox. 1, H304 |
| CAS: 68131-39-5 | Alcohols, C12-15, ethoxylated |
| Trade name: AGITAN® DF 6002 |
| EINECS: 265-159-2 | Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 3, H412 |
| CAS: 68131-39-5 | 75-100% |
| Polymer | 3-<5% |

- **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**
  No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:**
  Do not inhale explosion gases or combustion gases.
- **Additional information**
  Cool endangered receptacles with water spray.
  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.
  Particular danger of slipping on leaked/spilled product.
- **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).

(Contd. on page 3)
6.4 Reference to other sections
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 aerosols.

Information about fire - and explosion protection:
Protect from heat.
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:

| CAS: 64742-56-9 Distillates (petroleum), solvent-dewaxed light paraffinic |
|-----------------------------|-----------------------------|
| ACGIH-TWA                  | Long-term value: 5 mg/m³     |
|                            | mineral oil mist             |

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.
  - 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
    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.

(Contd. on page 4)
### 9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Fluid</td>
</tr>
<tr>
<td>Colour</td>
<td>Yellowish</td>
</tr>
<tr>
<td>Odour</td>
<td>Slight</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH-value (20 g/l) at 20 °C</td>
<td>≈ 8.5 (DIN ISO 976)</td>
</tr>
<tr>
<td>Change in condition</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>&gt; 180 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 196 °C (DIN EN ISO 2719)</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Product is not selfigniting</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Product is not explosive. <strong>However, formation of explosive air/vapour mixtures are possible.</strong></td>
</tr>
<tr>
<td>Explosion limits</td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>≈ 0.6 Vol % (01-2119487077-29)</td>
</tr>
<tr>
<td>Upper</td>
<td>≈ 6.5 Vol % (01-2119487077-29)</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>None.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not determined</td>
</tr>
<tr>
<td>Density at 20 °C</td>
<td>≈ 0.89 g/cm³ (DIN EN ISO 2811-1)</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined</td>
</tr>
<tr>
<td>Solubility in / Miscibility with water</td>
<td>Partly miscible</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not determined</td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>Dynamic at 20 °C</td>
<td>≈ 1800 mPa (DIN EN ISO 3219)</td>
</tr>
<tr>
<td>Kinematic at 40 °C</td>
<td>&gt; 20.5 mm²/s (DIN EN ISO 51562)</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 according to specifications.
· 10.3 Possibility of hazardous reactions
  Flammable vapour-air mixtures may develop if stored in large receptacles and above room temperature.
  Can react violently with oxygen rich (oxidising) material. Danger of 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:
  CAS: 64742-56-9 Distillates (petroleum), solvent-dewaxed light paraffinic
  Oral  LD50 >5,000 mg/kg (rat)
  Dermal LD50 >5,000 mg/kg (rabbit)
  CAS: 68131-39-5 Alcohols, C12-15, ethoxylated
  Oral  LD50 >2,000 mg/kg (rat)
· Primary irritant effect:
  · Skin corrosion/irritation Based on available data, the classification criteria are not met.
  · Serious eye damage/irritation
    Causes serious eye damage.
  · 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: 64742-56-9 Distillates (petroleum), solvent-dewaxed light paraffinic
  LL50 >100 mg/l (daphnia)
  EL50 >100 mg/l (algae)
  >100 mg/l (fish)
  CAS: 68131-39-5 Alcohols, C12-15, ethoxylated
  EC50 0.1-1 mg/l (algae) (Scenedesmus subspicatus / 72 h)

(Contd. of page 6)
Trade name: AGITAN® DF 6002

<table>
<thead>
<tr>
<th>0.1-1 mg/l (daphnia) (Daphnia magna / 48 h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC10 &gt;10,000 mg/l (bacteria) (Pseudomonas putida / 16 h)</td>
</tr>
<tr>
<td>LC50 1-10 mg/l (fish) (Brachydanio rerio / 96 h)</td>
</tr>
</tbody>
</table>

- **12.2 Persistence and degradability**
  - A part of the components is heavily biodegradable.
  - A part of the single components easily eliminable from water.

- **12.3 Bioaccumulative potential**
  - No further relevant information available.

- **12.4 Mobility in soil**
  - No further relevant information available.

- **Ecotoxical 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:**
    Due to available data on eliminability/decomposition and bioaccumulation potential a prolonged damage of the environment is unlikely.
    According to the criteria of the EU-classification and labelling "dangerous for environment"(93/21/EWG) the substance/ the product has to be classified as non-hazardous for the environment.
    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 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 05* organic wastes containing dangerous substances

- **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
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: AGITAN® DF 6002

14.4 Packing group
ADR/RID/ADN, IMDG, IATA: Void

14.5 Environmental hazards:
Marine pollutant: No

14.6 Special precautions for use
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
H304 May be fatal if swallowed and enters airways.
H318 Causes serious eye damage.
H400 Very toxic to aquatic life.
H412 Harmful 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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

* Data compared to the previous version altered.