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

1.1 Product identifier

Trade name: AGITAN® DF 6681

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): 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, 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

Results of PBT and vPvB assessment
PBT: None.
vPvB: None.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description:
hydrocarbons
non-ionic emulsifiers

Dangerous components:

<table>
<thead>
<tr>
<th>CAS</th>
<th>Compound Description</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-36-9</td>
<td>Distillates (petroleum), solvent-dewaxed light paraffinic</td>
<td>50-75%</td>
</tr>
<tr>
<td>EINECS: 265-159-2</td>
<td>Asp. Tox. T, H304</td>
<td></td>
</tr>
<tr>
<td>Reg.nr.: 01-2119480132-48</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.
Further information about storage conditions:

6.1 Personal precautions, protective equipment and emergency procedures
- 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:
  - 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
  - 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.

(Contd. on page 3)
Trade name: AGITAN® DF 6681

· 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

<table>
<thead>
<tr>
<th>Ingredients with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 64742-56-9 Distillates (petroleum), solvent-dewaxed light paraffinic</td>
</tr>
<tr>
<td>ACGIH-TWA Long-term value: 5 mg/m³ mineral oil mist</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:
    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.

· 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 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>General Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
</tr>
<tr>
<td>Form: Fluid</td>
</tr>
<tr>
<td>Colour: Yellow-brown</td>
</tr>
<tr>
<td>Odour: Slight</td>
</tr>
<tr>
<td>Odour threshold: Not determined.</td>
</tr>
<tr>
<td>pH-value (20 g/l) at 20 °C: ≈ 7.5 (DIN ISO 976)</td>
</tr>
</tbody>
</table>

(Contd. of page 2)
**Trade name:** AGITAN® DF 6681

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in condition</td>
<td></td>
</tr>
<tr>
<td>Melting point/freeze 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; 100 °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.</td>
</tr>
<tr>
<td></td>
<td>However, formation of explosive air/</td>
</tr>
<tr>
<td></td>
<td>vapour mixtures are possible.</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>Vapour pressure</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Density at 20 °C:</td>
<td>≈ 0.90 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>Emulsifiable.</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>≈ 1500 mPas (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>
<tr>
<td>9.2 Other information</td>
<td>No further relevant information available.</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) |

(Contd. of page 5)
### SECTION 12: Ecological information

#### 12.1 Toxicity

<table>
<thead>
<tr>
<th>Aquatic toxicity:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 64742-56-9 Distillates (petroleum), solvent-dewaxed light paraffinic</td>
<td></td>
</tr>
<tr>
<td>LL50</td>
<td>&gt;100 mg/l (daphnia)</td>
</tr>
<tr>
<td>EL50</td>
<td>&gt;100 mg/l (alga)</td>
</tr>
<tr>
<td>&amp;</td>
<td>&gt;100 mg/l (fish)</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.

#### 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:**
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 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
· 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:
  · Waterhazard class: Water hazard class 1 (German AwaSV, 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.

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)
LD50: Lethal dose, 50 percent
LC50: Lethal concentration, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Asp. Tox. 1: Aspiration hazard – Category 1

* Data compared to the previous version altered.