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

- 1.1 Product identifier
  - Trade name: AGITAN DF 681F
  - Article number: 8905
- 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: MUNZING 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: +49 761 19240 (Vergiftungs-Informations-Zentrale VIZ Freiburg)

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:
    - Mixture of substances listed below with nonhazardous additions.
    - hydrocarbons
    - non-ionic emulsifiers
  - Dangerous components:
    - CAS: 64742-35-8
      - Distillates (petroleum), hydrotreated light paraffinic
      - Asp. Tox. 1, H304
      - 20-50%
    - EINECS: 265-158-7
      - Reg.nr.: 01-2119487077-29
    - CAS: 64742-36-9
      - Distillates (petroleum), solvent-dewaxed light paraffinic
      - Asp. Tox. 1, H304
      - 20-50%
    - EINECS: 265-159-2
      - Reg.nr.: 01-2119480132-48
  - SVHC None.
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:**
  In case of seepage into the ground inform responsible authorities.
  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.
41.1.9 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.

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**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:
  - **64742-55-8 Distillates (petroleum), hydrotreated light paraffinic**
    - ACGIH - TWA Long-term value: 5 mg/m³ mineral oil mist
  - **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.
  - 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

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<table>
<thead>
<tr>
<th><strong>SECTION 9: Physical and chemical properties</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>9.1 Information on basic physical and chemical properties</strong></td>
</tr>
<tr>
<td><strong>General Information</strong></td>
</tr>
<tr>
<td><strong>Appearance:</strong></td>
</tr>
<tr>
<td>Form: Fluid</td>
</tr>
<tr>
<td>Colour: Yellowish</td>
</tr>
<tr>
<td>Odour: Light</td>
</tr>
<tr>
<td>Odour threshold: Not determined.</td>
</tr>
<tr>
<td><strong>pH-value (20 g/l) at 20 °C:</strong></td>
</tr>
<tr>
<td>≈ 7 (DIN ISO 976)</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
</tr>
<tr>
<td>Melting point/Melting range: Undetermined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range: Undetermined.</td>
</tr>
<tr>
<td><strong>Flash point:</strong></td>
</tr>
<tr>
<td>&gt; 100 °C (DIN EN ISO 2719)</td>
</tr>
<tr>
<td><strong>Flammability (solid, gaseous):</strong></td>
</tr>
<tr>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Ignition temperature:</strong></td>
</tr>
<tr>
<td>Decomposition temperature: Not determined.</td>
</tr>
<tr>
<td>Self-igniting: Product is not selfigniting.</td>
</tr>
<tr>
<td>Danger of explosion: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.</td>
</tr>
<tr>
<td><strong>Explosion limits:</strong></td>
</tr>
<tr>
<td>Lower: Not determined.</td>
</tr>
<tr>
<td>Upper: Not determined.</td>
</tr>
<tr>
<td>Oxidising properties: None.</td>
</tr>
<tr>
<td><strong>Vapour pressure:</strong></td>
</tr>
<tr>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Density at 20 °C:</strong></td>
</tr>
<tr>
<td>≈ 0.88 g/cm³ (DIN EN ISO 2811-1)</td>
</tr>
<tr>
<td><strong>Relative density:</strong></td>
</tr>
<tr>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Vapour density:</strong></td>
</tr>
<tr>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Evaporation rate:</strong></td>
</tr>
<tr>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with water:</strong></td>
</tr>
<tr>
<td>Insoluble.</td>
</tr>
<tr>
<td><strong>Partition coefficient (n-octanol/water):</strong></td>
</tr>
<tr>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
</tr>
<tr>
<td>Dynamic at 20 °C: ≈ 600 mPas (DIN EN ISO 3219)</td>
</tr>
<tr>
<td>Kinematic at 40 °C: &gt;20.5 mm²/s (DIN EN ISO 51562)</td>
</tr>
<tr>
<td><strong>9.2 Other information</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>SECTION 10: Stability and reactivity</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>10.1 Reactivity</strong> No further relevant information available.</td>
</tr>
<tr>
<td><strong>10.2 Chemical stability</strong></td>
</tr>
<tr>
<td><strong>Thermal decomposition / conditions to be avoided:</strong> No decomposition if used according to specifications.</td>
</tr>
<tr>
<td><strong>10.3 Possibility of hazardous reactions</strong></td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td><strong>10.4 Conditions to avoid</strong> No further relevant information available.</td>
</tr>
</tbody>
</table>
SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>Compound</th>
<th>Oral LD50 (&gt;5000 mg/kg (rat))</th>
<th>Dermal LD50 (&gt;3000 mg/kg (rabbit))</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-55-8 Distillates (petroleum), hydrotreated light paraffinic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64742-56-9 Distillates (petroleum), solvent-dewaxed light paraffinic</td>
<td></td>
<td></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:

<table>
<thead>
<tr>
<th>Compound</th>
<th>EL50 (&gt;100 mg/l (algae))</th>
<th>LL50 (&gt;100 mg/l (daphnia))</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-56-9 Distillates (petroleum), solvent-dewaxed light paraffinic</td>
<td></td>
<td></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.

Ecotoxic 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 Void

14.4 Packing group

ADR,RID,ADN, 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 dangerous according 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
  - National regulations:
    - Waterhazard class: Water hazard class 1 (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 MSDS:
  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
  SVHC: Substances of Very High Concern
  vPvB: very Persistent and very Bioaccumulative
  Asp. Tox. 1: Aspiration hazard, Hazard Category 1