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

1.1 Product identifier

Trade name: AGITAN® DF 691

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

The product is not classified as hazardous, 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:

| CAS: 64742-56-9 | Distillates (petroleum), solvent-dewaxed light paraffinic | 75-100% |
| EINECS: 265-159-2 | Asp. Tox. I, H304 |
| Reg.nr.: 01-2119480132-48 |

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.
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.
SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Additional information about design of technical facilities: No further data; see item 7.

· 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.

· 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 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

· General Information

· Appearance:

   Form: Fluid
   Colour: Yellow-brown
   Odour: Slight
   Odour threshold: Not determined.

· pH-value (20 g/l) at 20 °C: ≈ 7 (DIN ISO 976)
Trade name: AGITAN® DF 691

· Change in condition
  Melting point/freezing point: Undetermined.
  Initial boiling point and boiling range: > 250 °C

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

· Flammability (solid, gas): Not applicable.

· Decomposition temperature: Not determined.

· Auto-ignition temperature: Product is not self-igniting.

· Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· Explosion limits:
  Lower: ≈ 0.6 Vol % (01-2119487077-29)
  Upper: ≈ 6.5 Vol % (01-2119487077-29)

· Oxidising properties: None.

· Vapour pressure: Not determined.

· Density at 20 °C: ≈ 0.87 g/cm³ (DIN EN ISO 2811-1)
  Relative density: Not determined.
  Vapour density: Not determined.
  Evaporation rate: Not determined.

· Solubility in / Miscibility with water: Dispersible.

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

· Viscosity:
  Dynamic at 20 °C: ≈ 1000 mPas (DIN EN ISO 3219)
  Kinematic at 40 °C: > 20.5 mm²/s (DIN EN ISO 51562)

· 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

  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.
Trade name: AGITAN® DF 691

**SECTION 12: Ecological information**

12.1 Toxicity

Aquatic toxicity:

<table>
<thead>
<tr>
<th>CAS: 64742-56-9 Distillates (petroleum), solvent-dewaxed light paraffinic</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL50</td>
</tr>
<tr>
<td>EL50</td>
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</tbody>
</table>

12.2 Persistence and degradability
A part of the components is highly 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:

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.

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

National regulations:

Water hazard 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.

#### Department issuing SDS:
- **Product Safety Department**
- **E-Mail:** msds@munzing.com

#### Abbreviations and acronyms:
- **ADR:** Accord relatif au transport international 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
- **Asp. Tox. 1:** Aspiration hazard – Category 1