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

- **1.1 Product identifier**
  - Trade name: AGITAN® 381

- **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
  - Hazard word: Void
  - Hazard statements: Void

- **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: consisting of the following components.
  - Dangerous components: Void

**SECTION 4: First aid measures**

- **4.1 Description of first aid measures**
  - General information: No special measures required.
  - 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.

(Contd. on page 2)
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.
Additional information
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:
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
No special measures required.
Information about fire - and explosion protection: No special measures required.
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: Store away from oxidising agents.
Further information about storage conditions: None.
7.3 Specific end use(s)
No further relevant information available.

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.
52.0.9

· 8.2 Exposure controls
· Personal protective equipment:
  · General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.
  · Respiratory protection: Use suitable respiratory protective device only when aerosol or mist is formed.
  · Protection of hands:
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
    Recommended thickness of the material: ≥ 0.3 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: 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:
    · Form: Liquid
    · Colour: Brown
  · Odour:
    · Odour threshold: Not determined.
  · pH-value (20 g/l) at 20 °C: ≈ 6 (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.
**Safety data sheet**

*according to 1907/2006/EC, Article 31*

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- **Explosion limits:**
  - Lower: Not applicable
  - Upper: Not applicable
- **Oxidising properties:** None.
- **Vapour pressure:** Not determined.
- **Density at 20 °C:** ${\approx} 0.94 \text{ g/cm}^3$ (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:** ${\approx} 1500 \text{ mPas}$ (DIN EN ISO 3219)
  - **Kinematic:** Not determined.
- **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**
  - 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.
- **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.
- **Additional toxicological information:**
- **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: No further relevant information available.
- 12.2 Persistence and degradability: No further relevant information available.
- 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:
    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 03
- 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 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.

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)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative