

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

Printing date 04.01.2019

Version number 3

Revision: 22.11.2018

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

- **1.1 Product identifier**
- **Trade name: FOAM BAN® MS-550**
- **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**  
Eye Irrit. 2 H319 Causes serious eye irritation.  
Skin Sens. 1 H317 May cause an allergic skin reaction.

- **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**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**  
5-Decyne-4,7-diol, 2,4,7,9-tetramethyl-
- **Hazard statements**  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.
- **Precautionary statements**  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves / 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.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**

· <b>PBT:</b>	
CAS: 541-02-6	Decamethylcyclopentasiloxane
CAS: 556-67-2	Octamethylcyclotetrasiloxane
· <b>vPvB:</b>	
CAS: 541-02-6	Decamethylcyclopentasiloxane
CAS: 556-67-2	Octamethylcyclotetrasiloxane

**SECTION 3: Composition/information on ingredients**

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Preparation of polyethersilicones

· <b>Dangerous components:</b>		
CAS: 126-86-3 EINECS: 204-809-1 Reg.nr.: 01-2119954390-39	5-Decyne-4,7-diol, 2,4,7,9-tetramethyl- Eye Dam. 1, H318; Skin Sens. 1, H317; Aquatic Chronic 3, H412	1-<3%
CAS: 541-02-6 EINECS: 208-764-9 Reg.nr.: 01-2119511367-43	Decamethylcyclopentasiloxane Non-classified vPvB substance. Non-classified PBT substance.	<0.3%
CAS: 556-67-2 EINECS: 209-136-7 Reg.nr.: 01-2119529238-36	Octamethylcyclotetrasiloxane PBT; vPvB Flam. Liq. 3, H226; Repr. 2, H361f; Aquatic Chronic 4, H413	<0.3%

- **SVHC**

CAS: 541-02-6	Decamethylcyclopentasiloxane
CAS: 556-67-2	Octamethylcyclotetrasiloxane

- **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 and to be sure call for a doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **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:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

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- **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).  
Ensure adequate ventilation.
- **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**  
Store in cool, dry place in tightly closed receptacles.  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **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:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **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:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **DNELs**

**CAS: 126-86-3 5-Decyne-4,7-diol, 2,4,7,9-tetramethyl-**

Oral	consumer, long-term exposure, systemic effects	0.25 mg/kg bw/day (human)
	consumer, short-term exposure, systemic effects	0.75 mg/kg bw/day (human)
Dermal	worker, long-term exposure, systemic effects	0.5 mg/kg bw/day (human)
	worker, short-term exposure, systemic effects	1.5 mg/kg bw/day (human)
	consumer, long-term exposure, systemic effects	0.25 mg/kg bw/day (human)

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<i>Inhalative</i>	<i>consumer, short-term exposure, systemic effects</i>	0.75 mg/kg bw/day (human)
	<i>worker, short-term exposure, systemic effects</i>	5.28 mg/m <sup>3</sup> (human)
	<i>worker, long-term exposure, systemic effects</i>	1.76 mg/m <sup>3</sup> (human)
	<i>consumer, long-term exposure, systemic effects</i>	0.43 mg/m <sup>3</sup> (human)
	<i>consumer, short-term exposure, systemic effects</i>	1.29 mg/m <sup>3</sup> (human)

· **PNECs**

**CAS: 126-86-3 5-Decyne-4,7-diol, 2,4,7,9-tetramethyl-**

<i>fresh water</i>	0.04 mg/l (not specified)
<i>marine water</i>	0.004 mg/l (not specified)
<i>aqua - intermittent release</i>	0.4 mg/l (not specified)
<i>soil</i>	0.028 mg/kg (not specified)
<i>sediment (fresh water)</i>	0.032 mg/kg (not specified)
<i>sediment (marine water)</i>	0.032 mg/kg (not specified)
<i>sewage treatment plant</i>	7 mg/l (not specified)

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

*Immediately remove all soiled and contaminated clothing*

*Wash hands before breaks and at the end of work.*

· **Respiratory protection:**

*Use suitable respiratory protective device only when aerosol or mist is formed.*

*In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.*

· **Protection of hands:**

*Protective gloves*

*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*

*Neoprene gloves*

*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.*

· **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.*

· **Eye protection:** Goggles recommended during refilling

· **Body protection:** Protective work clothing

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**SECTION 9: Physical and chemical properties**

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

**Form:** Fluid  
**Colour:** White  
Cloudy

· **Odour:** Mild

· **Odour threshold:** Not determined.

· **pH-value (20 g/l) at 20 °C:** ≈ 8 (DIN ISO 976)

· **Change in condition**

**Melting point/freezing point:** Undetermined.  
**Initial boiling point and boiling range:** ≈100 °C (water)

· **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.

· **Explosion limits:**

**Lower:** Not applicable

**Upper:** Not applicable

· **Oxidising properties** None.

· **Vapour pressure:** Not determined.

· **Density at 20 °C:** ≈1.1 g/cm<sup>3</sup> (DIN EN ISO 2811-1)

· **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:** ≈ 4000 mPas (DIN EN ISO 3219)

· **Solvent content:**

**Water:** ≈ 25 %

· **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.

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· **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**  
Causes serious eye irritation.
- **Respiratory or skin sensitisation**  
May cause an allergic skin reaction.
- **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: 126-86-3 5-Decyne-4,7-diol, 2,4,7,9-tetramethyl-**

EC50 82 mg/l (alga) (*Selenastrum capricornutum* / 72h)

91 mg/l (daphnia) (*Daphnia magna* / 48h)

LC50 36 mg/l (fish) (*Pimephales promelas* / 96h)

- **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 -**

· **PBT:**

CAS: 541-02-6 Decamethylcyclopentasiloxane

CAS: 556-67-2 Octamethylcyclotetrasiloxane

· **vPvB:**

CAS: 541-02-6 Decamethylcyclopentasiloxane

CAS: 556-67-2 Octamethylcyclotetrasiloxane

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- **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
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- **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**

- |  |   |
|--|---|
| · <b>14.1 UN-Number</b>  |   |
| · <b>ADR/RID/ADN, ADN, IMDG, IATA</b>  | Void  |
| · <b>14.2 UN proper shipping name</b>  |   |
| · <b>ADR/RID/ADN, ADN, IMDG, IATA</b>  | Void  |
| · <b>14.3 Transport hazard class(es)</b>   |   |
| · <b>ADR/RID/ADN, ADN, IMDG, IATA</b>  |   |
| · <b>Class</b>   | Void  |
| · <b>14.4 Packing group</b>  |   |
| · <b>ADR/RID/ADN, IMDG, IATA</b>   | Void  |
| · <b>14.5 Environmental hazards:</b>   |   |
| · <b>Marine pollutant:</b>   | No  |
| · <b>14.6 Special precautions for user</b>                                       | Not applicable.                                   |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b> | Not applicable.                                   |
| · <b>Transport/Additional information:</b>                                       | Not a dangerous good to the above specifications. |
| · <b>UN "Model Regulation":</b>  | 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:**
- **Information about limitation of use:**  
Employment restrictions concerning juveniles must be observed.  
Employment restrictions concerning pregnant and lactating women must be observed.
- **Waterhazard class:** Water hazard class 1 (German AwSV, Self-assessment): slightly hazardous for water.

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· **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**

- H226 Flammable liquid and vapour.*
- H317 May cause an allergic skin reaction.*
- H318 Causes serious eye damage.*
- H361f Suspected of damaging fertility.*
- H412 Harmful to aquatic life with long lasting effects.*
- H413 May cause long lasting harmful effects to aquatic life.*

· **Department issuing SDS:**

*Product Safety Department  
E-Mail: [msds@munzing.com](mailto: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*
- LATA: 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)*
- DNEL: Derived No-Effect Level (REACH)*
- PNEC: Predicted No-Effect Concentration (REACH)*
- PBT: Persistent, Bioaccumulative and Toxic*
- SVHC: Substances of Very High Concern*
- vPvB: very Persistent and very Bioaccumulative*
- Flam. Liq. 3: Flammable liquids – Category 3*
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1*
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2*
- Skin Sens. 1: Skin sensitisation – Category 1*
- Repr. 2: Reproductive toxicity – Category 2*
- Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3*
- Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4*

· **\* Data compared to the previous version altered.**