Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name     FOAM BAN® HP949
Material No.     8169
Historic Material No. U2HP949

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses              Anti-foaming agent (defoamer)
Uses advised against                  Consumer use

1.3. Details of the supplier of the safety data sheet

Manufacturer      Munzing - Ultra Additives LLC.
                  1455 Broad Street
                  Bloomfield NJ  07003
                  United States
                  Email: info@munzing.us
                  Phone: 1-973-279-1306

Supplier          Münzing Chemie GmbH
                  Münzingstrasse 2
                  74232 Abstatt
                  Germany
                  Email: info@munzing.com
                  Phone: +49 (0) 7131/987-0

Emergency Telephone

Emergency telephone  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 [CLP]
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

2.2. Label Elements
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

EUH210 - Safety data sheet available on request

2.3. Other hazards
Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>EC No.</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
<th>REACH No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decamethylcyclopentasiloxane</td>
<td>208-764-9</td>
<td>541-02-6</td>
<td>&lt;0.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>209-136-7</td>
<td>556-67-2</td>
<td>&lt;0.30</td>
<td>Repr. 2 (H361f) Aquatic Chronic 4 (H413) Flamm. Liq. 3 (H226)</td>
<td></td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td>200-338-0</td>
<td>57-55-6</td>
<td>1 - &lt;3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modified Silica</td>
<td>Listed</td>
<td>-</td>
<td>1 - &lt;3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Full text of H- and EUH-phrases: see section 16

Substances for which there are Community workplace exposure limits. This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin Contact
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Inhalation
Move victim to fresh air.

Ingestion
Clean mouth with water and drink afterwards plenty of water.

Self-Protection of the First Aider
Use personal protection equipment.

4.2. Most important symptoms and effects, both acute and delayed

Most important symptoms and effects
No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician
Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media
Water spray. Carbon dioxide (CO2). Dry chemical. Alcohol resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable Extinguishing Media
Do not use water jetstream.

5.2. Special hazards arising from the substance or mixture
Hazardous combustion products
Varied particulate matter. Carbon monoxide. Carbon dioxide (CO2).

5.3. Advice for firefighters
Advice for fire-fighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Personal precautions
Use personal protection equipment. Avoid contact with skin, eyes or clothing.
Protective precautions
Use personal protection equipment.

6.2. Environmental precautions
Environmental Precautions
Avoid release to the environment.

6.3. Methods and material for containment and cleaning up
Methods for Containment
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Methods for Clean-Up
Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections
Reference to other sections
See Sections 5 & 7 for additional information.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling
Handling
Use personal protection equipment. Avoid contact with skin, eyes or clothing. Handle in accordance with good industrial hygiene and safety practice.
General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities
Storage Conditions
Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers.

7.3. Specific end use(s)
Specific Uses
No information available.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters
Exposure limits

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>EU</th>
<th>United Kingdom</th>
<th>France</th>
<th>Spain</th>
<th>Germany</th>
</tr>
</thead>
</table>

Propylene Glycol

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Italy</th>
<th>Portugal</th>
<th>Netherlands</th>
<th>Finland</th>
<th>Denmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modified Silica</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>TWA: 5 mg/m³</td>
</tr>
</tbody>
</table>

Propylene Glycol

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Austria</th>
<th>Switzerland</th>
<th>Poland</th>
<th>Norway</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Glycol</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>TWA: 25 ppm TWA: 79 mg/m³</td>
</tr>
<tr>
<td>Modified Silica</td>
<td>TWA: 4 mg/m³</td>
<td>-</td>
<td>-</td>
<td>TWA: 1.5 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

Derived No Effect Level (DNEL)
No information available.

Predicted No Effect Concentration (PNEC)
No information available.

8.2. Exposure controls

Engineering Controls
Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/Face Protection
Tight sealing safety goggles.

Skin protection
Wear suitable protective clothing and gloves. Wear protective nitrile rubber gloves. Glove thickness > 0.4 mm. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves.

Respiratory protection
In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Environmental exposure controls
No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks/ Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.05</td>
<td>No information available</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>No information available</td>
<td>No information available</td>
</tr>
</tbody>
</table>
Section 10: STABILITY AND REACTIVITY

10.1. Reactivity
Reactivity
Stable under normal conditions.

10.2. Chemical stability
Chemical Stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
Possibility of Hazardous Reactions
None under normal processing.

Hazardous Polymerization
Hazardous polymerization does not occur.

10.4. Conditions to avoid
Conditions to Avoid
Heat, flames and sparks.

10.5. Incompatible materials
Incompatible Materials

Hazardous decomposition products

Hazardous decomposition products
Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon monoxide. Carbon dioxide (CO2). Silicon dioxide. Formaldehyde.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects
Acute Toxicity
Product Information

Eyes
Contact with eyes may cause irritation. Avoid contact with eyes.

Skin
Substance may cause slight skin irritation. Avoid contact with skin.

Inhalation
Health injuries are not known or expected under normal use.

Ingestion
Health injuries are not known or expected under normal use.

Unknown acute toxicity
Not applicable.

ATEmix (oral) 5,801.00 mg/kg
ATEmix (dermal) 20,800.00 mg/kg
ATEmix (inhalation-dust/mist) No data available
### Chemical name

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>&gt; 4800 mg/kg (Rat)</td>
<td>&gt; 2000 mg/kg (Rabbit)</td>
<td>36 mg/l (Rat) 4 h</td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td>20 g/kg (Rat)</td>
<td>20800 mg/kg (Rabbit)</td>
<td></td>
</tr>
<tr>
<td>Organosiloxane</td>
<td>&gt; 24 g/kg (Rat) &gt; 17 g/kg (Rat)</td>
<td>&gt; 2 g/kg (Rabbit)</td>
<td></td>
</tr>
<tr>
<td>Modified Silica</td>
<td>7900 mg/kg (Rat)</td>
<td>2000 mg/kg (Rabbit)</td>
<td>&gt; 2.2 mg/L (Rat) 1 h</td>
</tr>
<tr>
<td>Polyglycol</td>
<td>5700 mg/kg (Rat) = 16 g/kg (Rat)</td>
<td></td>
<td>320 mg/m³ (Rat) 4 h</td>
</tr>
</tbody>
</table>

### Skin Corrosion/Irritation
No information available.

### Eye damage/irritation
No information available.

### Sensitization
No information available.

### Mutagenic effects
No information available.

### Reproductive Effects
No information available.

### STOT - single exposure
No information available.

### STOT - repeated exposure
No information available.

### Aspiration Hazard
No information available.

### Carcinogenic effects
No information available.

## Section 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### Ecotoxicity

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Algae</th>
<th>Fish</th>
<th>Daphnia magna</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>-</td>
<td>1000: 96 h Lepomis macrochirus mg/L LC50 500: 96 h Brachydanio rerio mg/L LC50</td>
<td>25.2: 24 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td>19000: 96 h Pseudokirchneriella subcapitata mg/L EC50</td>
<td>LC50: 710-55770 mg/L, 96h (Fathead minnow)</td>
<td>EC50: &gt; 10000 mg/L 48 h</td>
</tr>
<tr>
<td>Modified Silica</td>
<td>440: 72 h Pseudokirchneriella subcapitata mg/L EC50</td>
<td>5000: 96 h Brachydanio rerio mg/L LC50 static</td>
<td>7600: 48 h Ceriodaphnia dubia mg/L EC50</td>
</tr>
<tr>
<td>Polyglycol</td>
<td>EC50, 48 hr: &gt;100 mg/L</td>
<td>LC50: &gt;100 mg/l (Golden orfe), 96 hr</td>
<td>EC50 (48 h): &gt; 100 mg/l</td>
</tr>
</tbody>
</table>

#### Unknown Aquatic Toxicity
Not applicable.

### Persistence and degradability

#### Persistence and degradability
No information available.

### 12.3. Bioaccumulative potential

#### Bioaccumulation/Accumulation

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>5.1</td>
</tr>
</tbody>
</table>

### 12.4. Mobility in soil

#### Mobility in Environmental Media
No information available.

### 12.5. Results of PBT and vPvB assessment
PBT and vPvB assessment . Not applicable.

12.6. Other adverse effects

Other adverse effects . No information available.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products Contain and dispose of waste according to local regulations.

Contaminated packaging Empty remaining contents.

Waste codes / waste designations according to EWC / AVV Not applicable.

Section 14: TRANSPORT INFORMATION

ADR/RID Not regulated

IMDG/IMO Not regulated

IATA Not regulated

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories

US TSCA Complies

Australia (AICS) Complies

Canada (DSL) This product contains components listed on the Canadian NDSL list. All other components are on the Canadian DSL list

China (IECSC) Complies

Europe (EINECS/ELINCS/NLP) Complies

Japan (ENCS) Complies

South Korea (KECL) Contact manufacturer

Philippines (PICCS) Complies

New Zealand Contact manufacturer

Taiwan (TCSI) Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Germany

WGK Classification (AwSV) Water endangering class = 1 (self estimation)

European Union
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Authorizations and/or restrictions on use:
This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV). This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Persistent Organic Pollutants
Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009
Not applicable

15.2. Chemical safety assessment
No information available

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3
H226 - Flammable liquid and vapor
H361f - Suspected of damaging fertility
H413 - May cause long lasting harmful effects to aquatic life

Legend
SVHC: Substances of Very High Concern for Authorization:

TWA - TWA (time-weighted average)
STEL - STEL (Short Term Exposure Limit)
Ceiling - Maximum limit value
* - Skin designation

Classification procedure Minimum classification

Issue Date: 2018-04-13
Revision Date: 2019-05-16
Reason for revision SDS sections updated, 15.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet