1. IDENTIFICATION

1.1. Product identifier

Product name  FOAM BAN® 1550

Other means of identification

Material No.  8232
Historic Material No.  U21550

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

Recommended Use  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

Emergency Telephone  CHEMTREC (24 hrs - for spill, leak or transportation incidents):
US: 1-800-424-9300
non-US: 1-703-527-3887

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

OSHA Regulatory Status  This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>2A</td>
</tr>
<tr>
<td>Skin Sensitization</td>
<td>1</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>2</td>
</tr>
</tbody>
</table>

2.2. Label Elements

Signal Word  Warning

Hazard Statements  Causes serious eye irritation
May cause an allergic skin reaction
Suspected of damaging fertility or the unborn child

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention
Specific treatment (see supplemental first aid instructions on this label)

FIRST AID

Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin
IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

2.3. Other hazards

Hazards not otherwise classified (HNOC)
Not applicable

Unknown acute toxicity
Not applicable

Other Information
Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-Decyne-4,7-diol, 2,4,7,9-tetramethyl-</td>
<td>126-86-3</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>556-67-2</td>
<td>0.1 - 1</td>
</tr>
<tr>
<td>Hydrophobic silica</td>
<td>Proprietary</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret. If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin Contact
IF ON SKIN: Wash with plenty of soap and water. If skin irritation persists, call a physician. Wash contaminated clothing before reuse.
Inhalation Move victim to fresh air.

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

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.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media Water spray. Carbon dioxide (CO2). Dry chemical. Alcohol resistant foam. Limestone powder. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Explosion Data
- Sensitivity to mechanical impact Not applicable.
- Sensitivity to static discharge Not sensitive.

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.

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 Ensure adequate ventilation. Avoid exceeding of the given occupational exposure limits (see section 8).

Emergency procedures Evacuate personnel to safe areas. Remove all sources of ignition. Keep people away from and upwind of spill/leak.

6.2. Environmental precautions

Environmental precautions Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for Containment Local authorities should be advised if significant spillages cannot be contained. 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 Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labelled containers.
6.4. Reference to other sections

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

**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.

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.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

8.1. Control parameters

**Exposure Guidelines**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrophobic silica</td>
<td>TWA: 10 mg/m$^3$</td>
<td>TWA: 6 mg/m$^3$</td>
<td>-</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

**Engineering Controls**  Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

**Individual protection measures, such as 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.
- **General Hygiene Considerations**  Handle in accordance with good industrial hygiene and safety practice.

**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>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Opaque White To Yellow</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>8</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>
Explosive properties
No information available.

Oxidizing properties
No information available.

9.2. Other information

VOC content (%)
No information available

Liquid Density
8.70 lbs/gal

## 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

## 11. TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Product Information
Information given is based on data on the components and the toxicology of similar products.

Eyes
Causes serious eye irritation. Avoid contact with eyes.

Skin
Substance may cause slight skin irritation. May cause sensitization by skin contact. 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.

Numerical measures of toxicity - Product Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-Decyne-4,7-diol, 2,4,7,9-tetramethyl-</td>
<td>&gt; 500 mg/kg (Rat)</td>
<td>&gt; 1000 mg/kg (Rabbit)</td>
<td>&gt; 20 mg/L (Rat)</td>
</tr>
<tr>
<td>Polyalylene glycol</td>
<td>= 28 g/kg (Rat)</td>
<td>&gt; 20 g/kg (Rabbit)</td>
<td>&gt; 13 ppm (Rat)</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>
</tbody>
</table>

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization

No information available.

Mutagenic effects

No information available.

Reproductive Effects

Suspected of damaging fertility or the unborn child.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Aspiration Hazard

No information available.

Carcinogenicity

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

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>5-Decyne-4,7-diol, 2,4,7,9-tetramethyl-</td>
<td>EC50 (72h): 82 mg/l (Selenastrum capricornutum)</td>
<td>LC50 (24 h): 42 mg/l Carp, (Cyprinus carpio)</td>
<td>EC50 (48 h): 91 mg/l (Daphnia magna)</td>
</tr>
<tr>
<td></td>
<td>EC50 (72h): 112 mg/l (Selenastrum costatum)</td>
<td>LC50 (96 h): 36 mg/l Fathead minnow (Pimephales promelas)</td>
<td>LC50 (48 h): 166 mg/l (Daphnia magna)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LC50 (96 h): 42 mg/l Carp (Cyprinus carpio)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LC50 (96 h): 43 mg/l Species: Turbot(Scophthalmus maximus)</td>
<td></td>
</tr>
<tr>
<td>Polyalylene glycol</td>
<td>-</td>
<td>LC50 (96 h): &gt; 73,000 mg/l (Fathead minnow (Pimephales promelas))</td>
<td>LC50: &gt; 10,000 mg/l (Daphnia magna)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LC50: &gt; 500 mg/L (Golden orfe)</td>
<td></td>
</tr>
<tr>
<td>Hydrophobic silica</td>
<td>-</td>
<td>LC50: &gt; 10,000 mg/l, 96h</td>
<td>EC50: &gt; 10,000 mg/l, 24h</td>
</tr>
</tbody>
</table>

Persistence and degradability

...
Persistence and degradability. No information available.

12.3. Bioaccumulative potential
Bioaccumulation/Accumulation. No information available.

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.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Disposal Methods
Contain and dispose of waste according to local regulations.

Contaminated packaging
Empty containers should be taken for local recycling, recovery or waste disposal. Dispose of contents/containers in accordance with local regulations.

US EPA Waste Number
Product, as sold, is not a US EPA RCRA Waste.

14. TRANSPORT INFORMATION

DOT
Not regulated

ICAO/IATA
Not regulated

IMDG/IMO
Not regulated

15. REGULATORY INFORMATION

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

International Inventories

<table>
<thead>
<tr>
<th>Country</th>
<th>Compliance Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>US TSCA</td>
<td>Complies</td>
</tr>
<tr>
<td>Australia (AICS)</td>
<td>Complies</td>
</tr>
<tr>
<td>Canada (DSL)</td>
<td>This product contains components listed on the Canadian NDSL list. All other components are on the Canadian DSL list</td>
</tr>
<tr>
<td>China (IECSC)</td>
<td>Complies</td>
</tr>
<tr>
<td>Europe (EINECS/ELINCS/NLP)</td>
<td>Complies</td>
</tr>
<tr>
<td>Japan (ENCS)</td>
<td>Complies</td>
</tr>
<tr>
<td>South Korea (KECL)</td>
<td>Contact manufacturer</td>
</tr>
<tr>
<td>Philippines (PICCS)</td>
<td>Contact manufacturer</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Contact manufacturer</td>
</tr>
<tr>
<td>Taiwan (TCSI)</td>
<td>Complies</td>
</tr>
</tbody>
</table>

Legend
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories
Should this product meet EPCRA 311/312 Tier II reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (40 CFR 61)
This product does not contain any HAPs.

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65
This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov. Impurities (<0.1%).

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol</td>
<td>Developmental</td>
</tr>
<tr>
<td>Methylisobutyl ketone</td>
<td>Carcinogen</td>
</tr>
<tr>
<td></td>
<td>Developmental</td>
</tr>
<tr>
<td>Ethyl acrylate</td>
<td>Carcinogen</td>
</tr>
<tr>
<td>Methyl alcohol</td>
<td>Developmental</td>
</tr>
<tr>
<td>Ethylene oxide</td>
<td>Carcinogen</td>
</tr>
<tr>
<td></td>
<td>Developmental</td>
</tr>
<tr>
<td></td>
<td>Female Reproductive Male Reproductive</td>
</tr>
</tbody>
</table>

U.S. State Right-to-Know

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>0.1 - 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potassium hydroxide</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>&lt;0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isopropyl alcohol</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>&lt;0.1</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health</th>
<th>2</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Instability</td>
<td>0</td>
</tr>
<tr>
<td>HMIS III</td>
<td>Health</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Physical Hazard</td>
<td>0</td>
</tr>
</tbody>
</table>

Issue Date: 2019-09-26
Revision Date: 2019-09-26
Reason for revision: Not applicable.

For industrial use only. Refer to the safety data sheet and/or instructions for use.

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