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

1.1. Product identifier

Product name: DEE FO® PI-547
Material No.: 5850
Historic Material No.: U1PI547

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]
2.3. Other hazards

No information available.

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2 Mixtures

**Chemical nature of the product**

Polymere dispersion

<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 registration number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, amorphous, fumed, cryst.-free</td>
<td>601-216-3</td>
<td>112945-52-5</td>
<td>&lt;=1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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

Substance with a Community workplace exposure limit.

### 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.

**Self-Protection of the First Aider**

Use personal protection equipment.

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

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**

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

**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.

5.3. Advice for firefighters

5.3. Advice for firefighters  
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

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

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling  
Handle in accordance with good industrial hygiene and safety practice.

General Hygiene Considerations  
Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse. Slippery, can cause falls if walked on.

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>Austria</th>
<th>Switzerland</th>
<th>Poland</th>
<th>Norway</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, amorphous</td>
<td>TWA: 4 mg/m³</td>
<td>-</td>
<td>-</td>
<td>-</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.
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>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Translucent, Light yellow</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Slight</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
<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>100 °C</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 100 °C</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>1.02</td>
<td>No information available</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Dispersible in water</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>~ 1,000 cp</td>
<td>No information available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No information available</td>
<td></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  Strong oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products  Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon oxides. Silicon dioxide. Formaldehyde.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute Toxicity

Product Information

<table>
<thead>
<tr>
<th>Component Information</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, amorphous, fumed,</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 5000 mg/kg (Rabbit)</td>
<td>LC50: &gt;= 0.139 mg/l (4hr). Maximum attainable concentration. No deaths occurred.</td>
</tr>
<tr>
<td>cryst.-free</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polypropylene glycol</td>
<td>= 3750 mg/kg (Rat) &gt; 2 g/kg (Rat)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polyoxyethylene monoctadecyl</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ether</td>
<td>= 1900 mg/kg (Rat) = 2900 mg/kg (Rat)</td>
<td></td>
<td></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  Information given is based on data on the components and the ecotoxicology of similar products.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Algae</th>
<th>Fish</th>
<th>Daphnia magna</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, amorphous, fumed, crys.-free</td>
<td>-</td>
<td>LC50: &gt;10000 mg/L, 96h (Brachydanio rerio)</td>
<td>EC50: &gt;10000, 24h (daphnia)</td>
</tr>
<tr>
<td>Polypropylene glycol</td>
<td>-</td>
<td>LC50 (96h): &gt;100 mg/L (Rainbow trout)</td>
<td>EC50 (48 h): &gt; 100 mg/l</td>
</tr>
<tr>
<td>Siloxanes and Silicones, di-Me, reaction products with silica</td>
<td>-</td>
<td>LC50: &gt;10000 mg/l, 96h</td>
<td>EC50: &gt;10000 mg/l, 24h</td>
</tr>
<tr>
<td>Polyoxyethylene mono-octadecyl ether</td>
<td>-</td>
<td>LC50 (96 h): &lt;5.6 mg/L (Rainbow trout)</td>
<td>-</td>
</tr>
</tbody>
</table>

Unknown Aquatic Toxicity  0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Persistence and degradability

Persistence and degradability  No information available.

12.3. Bioaccumulative potential

Bioaccumulation/Accumulation  Not likely to bioaccumulate.

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 determined. Not applicable.

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
07 02 99 - wastes not otherwise specified.

### Section 14: TRANSPORT INFORMATION

| 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**

<table>
<thead>
<tr>
<th>Country</th>
<th>Compliance Status</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>Complies</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>Complies</td>
</tr>
<tr>
<td>Philippines (PICCS)</td>
<td>Complies</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Complies</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
- 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 classification)

**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
No information available

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: 2009-02-06
Revision Date: 2020-03-10
Reason for revision SDS sections updated, 2, 3.

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