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

1.1. Product identifier

Product name
DEE FO® PI-40

Material No.
9710

Historic Material No.
U1PI40

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  Polymer 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 No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decamethylcyclopentasiloxane</td>
<td>208-784-9</td>
<td>541-02-6</td>
<td>&lt;0.30</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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

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

General Advice  Immediate medical attention is not required.

Eye Contact  Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.

Skin Contact  Wash with soap and water. Remove and wash contaminated clothing before re-use.

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

Most important symptoms and effects  No information available.

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

Notes to Physician  No information available.

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. Water mist may be used to cool closed containers.

Unsuitable Extinguishing Media  No information available.

5.2. Special hazards arising from the substance or mixture
Hazardous combustion products  Carbon oxides. Vapors may form explosive mixtures with air.

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  Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing.

General Hygiene Considerations  Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions  Keep containers tightly closed in a dry, cool and well-ventilated place. Keep from freezing. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.

7.3. Specific end use(s)

Specific Uses  No information available.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits  This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
8.2. Exposure controls

Engineering Controls  
Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/Face Protection  
Safety glasses with side-shields. If splashes are likely to occur, wear: . Tight sealing safety goggles.

Skin protection  
Wear suitable protective clothing and gloves. Wear protective nitrile rubber gloves. Wear protective butyl rubber gloves. 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>Physical State</td>
<td>Liquid</td>
<td>No information available</td>
</tr>
<tr>
<td>Appearance</td>
<td>Translucent, White</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>7.2</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>204 °C / 399 °F</td>
<td>Ceta Closed Cup</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>1.01</td>
<td>No information available</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Slightly soluble</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>~1900 cps</td>
<td>No information available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not an explosive</td>
<td>No information available</td>
</tr>
<tr>
<td>Oxidizing properties</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 Strong oxidizing agents.

Hazardous decomposition products

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

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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) | 12,695.00 mg/kg |
| ATEmix (dermal) | 31,287.00 mg/kg |
| ATEmix (inhalation-dust/mist) | No data available |

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organosiloxane polymer</td>
<td>&gt; 24 g/kg ( Rat ) &gt; 17 g/kg ( Rat )</td>
<td>&gt; 2 g/kg ( Rabbit )</td>
<td>No data available</td>
</tr>
<tr>
<td>Polyalkylene glycol</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
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>Polyalkylene glycol</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
Not readily biodegradable.

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.

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.

Other information
Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: TRANSPORT INFORMATION

ADR/RID
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)**: Complies
- **China (IECSC)**: Complies
- **Europe (EINECS/ELINCS/NLP)**: Complies
- **Japan (ENCS)**: Complies
- **South Korea (KECL)**: Complies
- **Philippines (PICCS)**: Complies
- **New Zealand**: Complies
- **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**
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: 2011-10-14
Revision Date: 2018-12-12
Reason for revision SDS sections updated, 3.

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

Disclaimer
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End of Safety Data Sheet