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

1.1. Product identifier

Product name: DEE FO® PI-75
Product code: U1PI75

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

1.4. Emergency telephone number

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

EU: +49 761 19240 (VIZ Freiburg)

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
No information available.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures
Chemical nature of the product  Polymer dispersion

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene oxide-Propylene oxide copolymer monobutyl ether</td>
<td>618-542-7</td>
<td>9038-95-3</td>
<td>1 - 5</td>
<td>Xn;R20, Xi;R37</td>
<td>Acute Tox. 2 (H330) STOT SE, 3 (H335)</td>
<td>No data available</td>
</tr>
</tbody>
</table>

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

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures
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 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  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. Formaldehyde.
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 and 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. Slippery, can cause falls if walked on.

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.

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration No information available.
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.

Respiratory protection
In case of insufficient ventilation, wear suitable respiratory equipment.

Environmental exposure controls
No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State
Liquid

Appearance
Translucent, Off-white

Odor
Slight

Odor threshold
No information available

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks/ Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>7.5</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting point/freezing 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></td>
<td></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>~1500 cps</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</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>

9.2. Other information

VOC content (%) 0.19% (EPA Method 24)

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
Keep at temperatures above 0°C.

10.5. Incompatible materials

Incompatible Materials
Strong oxidizing agents.

10.6. 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

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
19.66% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document

<table>
<thead>
<tr>
<th>Component Information</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organosiloxane polymer</td>
<td>&gt; 17 g/kg (Rat)</td>
<td>&gt; 2 g/kg (Rab)</td>
<td></td>
</tr>
<tr>
<td>Polyalkylene glycol</td>
<td>= 5700 mg/kg (Rat)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethylene oxide-Propylene oxide copolymer monobutyl ether</td>
<td>= 12300 µL/kg (Rat)</td>
<td>= 14100 µL/kg (Rab)</td>
<td>&gt; 1 - &lt; 5 mg/L (Rat, 4h)</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>Component</th>
<th>Algae</th>
<th>Fish</th>
<th>Daphnia magna</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organosiloxane polymer</td>
<td>-</td>
<td>-</td>
<td>EC50: 220-520 mg/L</td>
</tr>
<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>
<tr>
<td>Ethylene oxide-Propylene oxide copolymer monobutyl ether 9038-95-3</td>
<td>-</td>
<td>LC50(96h): &gt; 100 mg/l (Golden orfe)</td>
<td>-</td>
</tr>
</tbody>
</table>

Unknown Aquatic Toxicity
66.29906% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

12.2. 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.

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)
Complies

China (IECSC)
Complies

Europe (EINECS/ELINCS/NLP)
Complies

Japan (METI)
Complies

South Korea (KECL)
Complies

Philippines (PICCS)
Complies

New Zealand
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

WGK Classification (VwVwS)
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 R-phrases referred to under sections 2 and 3
R20 - Harmful by inhalation
R37 - Irritating to respiratory system

Full text of H-Statements referred to under section 3
H330 - Fatal if inhaled
H335 - May cause respiratory irritation

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: 2009-01-16
Revision Date: 2015-06-02
Reason for revision Update to Format.

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