This safety data sheet complies with the requirements of:
Classification according to Directive 67/548/EEC or 1999/45/EC

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

1.1. Product identifier
Product name: DEE FO® PI-320
Product code: U1PI320
Contains Propylene oxide ethylene oxide polymer monobutyl ether

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]

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Inhalation (Dusts/Mists)</td>
<td>2 - (H330)</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>3 - (H335)</td>
</tr>
</tbody>
</table>
2.2. Label Elements

Signal Word
Danger

Hazard Statements
H330 - Fatal if inhaled
H335 - May cause respiratory irritation

Precautionary Statements - EU (§28, 1272/2008)
P310 - Immediately call a POISON CENTER or doctor
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P320 - Specific treatment is urgent (see supplemental first aid instructions on this label)

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>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene oxide ethylene oxide polymer monobutyl ether</td>
<td>-</td>
<td>9038-95-3</td>
<td>75 - 100</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

General Advice  Take off immediately all contaminated clothing.

Eye Contact  Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

Skin Contact  Wash with soap and water.

Inhalation  IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician or poison control center immediately.

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

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. Silicon dioxide.

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.
General Hygiene Considerations

Take off contaminated clothing and wash before reuse. Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. 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 away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

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 (PNEC)

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.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.

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>Viscous, White</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>7.8</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>&gt; 93.3 °C / 200 °F</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>
</tbody>
</table>

Remarks/ Method:

No information available.
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.

10.4. Conditions to avoid
Conditions to Avoid
Temperatures above 150 °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. Formaldehyde. Silicon dioxide.

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
May be fatal if inhaled. Irritating to respiratory system. Avoid breathing vapors or mists.

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

8.75% of the mixture consists of ingredient(s) of unknown toxicity.

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

- ATEmix (oral) 494,545.00 mg/kg
- ATEmix (dermal) 58,473.00 mg/kg
- ATEmix (inhalation-dust/mist) 0.33 mg/L

Component Information

<table>
<thead>
<tr>
<th>Component</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organosiloxane</td>
<td>&gt; 17 g/kg (Rat)</td>
<td>&gt; 2 g/kg (Rabbit)</td>
<td></td>
</tr>
<tr>
<td>Propylene oxide ethylene oxide polymer monobutyl ether</td>
<td>&gt; 21,753 mg/kg (Rat)</td>
<td>&gt; 21,120 mg/kg (Rabbit)</td>
<td>0.33 mg/l Aerosol (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
Respiratory system.

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.

Unknown Aquatic Toxicity
12.1875% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

12.2. 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.

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).

Perspective 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
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: 2009-01-19
Revision Date: 2015-07-16
Reason for revision Update to Format, SDS sections updated, 2, 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