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

1.1. Product identifier

Product name: DEE FO® 2020A
Material No.: 6465
Historic Material No.: U12020A

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.

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### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2 Mixtures

**Chemical nature of the product**  
Petroleum oil-based mixture

<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>Fatty synthetic wax</td>
<td>Listed</td>
<td>-</td>
<td>3 - &lt;5</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Fatty synthetic wax</td>
<td>Listed</td>
<td>-</td>
<td>1 - &lt;3</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Petroleum distillates, solvent dewaxed light paraffinic</td>
<td>265-159-2</td>
<td>64742-56-9</td>
<td>20 - 50</td>
<td>Asp. Tox. 1 (H304) Note L applies</td>
<td>-</td>
</tr>
<tr>
<td>Petroleum distillates, solvent dewaxed heavy paraffinic</td>
<td>265-169-7</td>
<td>64742-65-0</td>
<td>50 - 75</td>
<td>Note L applies</td>
<td>-</td>
</tr>
</tbody>
</table>

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

**Note L:**  
The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346. This note applies only to certain complex oil derived substances in Annex I.

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### Section 4: FIRST AID MEASURES

#### 4.1 Description of first aid measures

**Eye Contact**  
Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call 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. If swallowed, DO NOT induce vomiting.

**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.
Unsuitable Extinguishing Media
Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products
May burn violently. Decomposition may be self-accelerating and produce large amounts of gases. Carbon oxides.

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

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. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse. Do not get in eyes, on skin, or on clothing. Slippery, can cause falls if walked on.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a cool, well-ventilated place.

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

Personal protective equipment

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

Skin protection
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn. PVC. Neoprene. PVA.

Respiratory protection
If exposure limits are likely to be exceeded or if irritation or other symptoms are experienced, NIOSH/MSHA or EN 136 approved respiratory protection should be worn.

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>Opaque, White</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>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>196 °C / 385 °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></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>&lt; 0.01</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>0.86</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>insoluble</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>&lt; 2500 cps @25C</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
Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon oxides.

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**
May cause skin irritation and/or dermatitis. Avoid contact with skin.

**Inhalation**
Inhalation of vapors in high concentration may cause irritation of respiratory system.

**Ingestion**
Health injuries are not known or expected under normal use.

**Unknown acute toxicity**
Not applicable.

<table>
<thead>
<tr>
<th>ATEmix (oral)</th>
<th>123,847.00 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEmix (dermal)</td>
<td>4,717.00 mg/kg</td>
</tr>
<tr>
<td>ATEmix (inhalation-dust/mist)</td>
<td>161.00 mg/L</td>
</tr>
</tbody>
</table>

Component Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Oral LD50 (Rat)</th>
<th>Dermal LD50 (Rabbit)</th>
<th>Inhalation LC50 (Rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatty synthetic wax</td>
<td>&gt; 5000 mg/kg</td>
<td>&gt; 20,000 mg/kg</td>
<td>&gt; 6.3 mg/L</td>
</tr>
<tr>
<td>Petroleum distillates, solvent dewaxed light paraffinic</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 5000 mg/kg (Rabbit)</td>
<td>&gt; 5399 mg/m³ (Rat) 4 h</td>
</tr>
<tr>
<td>Petroleum distillates, solvent dewaxed heavy paraffinic</td>
<td>5000 mg/kg (Rat)</td>
<td>2000 mg/kg (Rabbit)</td>
<td>&gt; 2400 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  Discharge into the environment must be avoided. Aquatic toxicity is unlikely due to low solubility.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Algae</th>
<th>Fish</th>
<th>Daphnia magna</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatty synthetic wax</td>
<td>-</td>
<td>LC50 (96 h): &gt;1000 mg/l</td>
<td>EC50 (48 h): 140 mg/l</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Rainbow trout)</td>
<td>(Daphnia)</td>
</tr>
<tr>
<td>Fatty synthetic wax</td>
<td>-</td>
<td>-</td>
<td>EC50 (48 h): 140 mg/l</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Daphnia)</td>
</tr>
<tr>
<td>Petroleum distillates, solvent</td>
<td>-</td>
<td>5000: 96 h Oncorhynchus</td>
<td>1000: 48 h Daphnia magna</td>
</tr>
<tr>
<td>dewaxed light paraffinic</td>
<td></td>
<td>mykiss mg/L LC50</td>
<td>mg/L EC50</td>
</tr>
<tr>
<td>Petroleum distillates, solvent</td>
<td>-</td>
<td>5000: 96 h Oncorhynchus</td>
<td>1000: 48 h Daphnia magna</td>
</tr>
<tr>
<td>dewaxed heavy paraffinic</td>
<td></td>
<td>mykiss mg/L LC50</td>
<td>mg/L EC50</td>
</tr>
</tbody>
</table>

Unknown Aquatic Toxicity  Not applicable.

Persistence and degradability

Persistence and degradability  Not readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulation/Accumulation  Not likely to bioaccumulate.

12.4. Mobility in soil

Mobility in Environmental Media  The product is insoluble and floats on water. 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 containers should be taken for local recycling, recovery or waste disposal. Do not burn, or use a cutting torch on, the empty drum.

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 (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
H350 - May cause cancer if swallowed

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: 2009-01-09
Revision Date: 2018-12-27
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