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

1.1. Product identifier
Product name: COOLI ADDITIVE PLUS
Cat. No. 49900071, 49900072
Container size: 1 l, 4 l

1.2. Relevant identified uses of the substance or mixture and uses advised against
Application: Additive for cutting fluid.

1.3. Details of the supplier of the safety data sheet
Supplier: Struers ApS
Pederstrupvej 84
DK-2750 Ballerup
Tel: +45 44 600 800

Responsible for safety data sheet authoring: Responsible for safety data sheet authoring: DHI
Any questions to the contents of this safety data sheet should be sent to: struers@struers.dk

1.4. Emergency telephone number
NHS: 111

+45 44 600 800
(Only during office hours)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture
CLP: Aquatic Chronic 3; H412

2.2. Label elements
H412 Harmful to aquatic life with long lasting effects.
P273 Avoid release to the environment.
P501 Dispose of contents/container in accordance with local regulations.

2.3. Other hazards
PBT/vPvB: No information available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures
The following substances shall be indicated according to legislation:
<table>
<thead>
<tr>
<th>%</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>REACH Reg. No.</th>
<th>Chemical name</th>
<th>Hazard classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-7</td>
<td>105-59-9</td>
<td>203-312-7</td>
<td>01-2119488970-24-xxxx</td>
<td>2,2’-(Methylimino)diethanol</td>
<td>Eye Irrit. 2;H319</td>
<td></td>
</tr>
<tr>
<td>1-5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Sebacic acid, compound with 2-aminoethanol, ionic mixture, chemical equilibrium of acid and base in an aqueous solution</td>
<td>Acute Tox.;H332 STOT SE 3;H335</td>
<td></td>
</tr>
<tr>
<td>1-2.5</td>
<td>95-14-7</td>
<td>202-394-1</td>
<td>01-2119979079-20-xxxx</td>
<td>1,2,3-Benzotriazole</td>
<td>Acute Tox.;H302 Eye Irrit. 2;H319 Aquatic Chronic 2;H411</td>
<td></td>
</tr>
<tr>
<td>0.1-0.5</td>
<td>5397-31-9</td>
<td>226-420-6</td>
<td>-</td>
<td>3-(2-Ethylhexyloxy)propylamine</td>
<td>Acute Tox.;H311 Acute Tox.;H302 Skin Corr. 1A;H314 Aquatic Chronic 2;H411</td>
<td></td>
</tr>
<tr>
<td>0.1-&lt;0.5</td>
<td>31075-24-8</td>
<td>608-578-1</td>
<td>-</td>
<td>1,2-Ethanediamine, N,N,N',N' -tetramethyl-, polymer with 1,1'-oxybis[2-chloroethane]</td>
<td>Acute Tox.;H302 Acute Tox.;H332 Eye Irrit. 2;H319 Aquatic Acute 1;H400 Aquatic Chronic 1;H410</td>
<td></td>
</tr>
<tr>
<td>&lt;0.2</td>
<td>3811-73-2</td>
<td>223-296-5</td>
<td>-</td>
<td>Pyridine-2-thiol 1-oxide, sodium salt</td>
<td>Acute Tox.;H302 Acute Tox.;H312 Acute Tox.;H332 Skin Irrit. 2;H315 Eye Irrit. 2;H319 Aquatic Acute 1;H400</td>
<td></td>
</tr>
</tbody>
</table>

Notes:  
*: M-factor (acute): 10; M-factor (chronic): 1  
**: M-factor (acute): 100

References: The full text for all hazard statements is displayed in section 16.
SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation: Move injured person into fresh air and keep person calm under observation. If uncomfortable: Seek hospital and bring these instructions.

Skin contact: Remove contaminated clothes and rinse skin thoroughly with water. In case of eczema or other skin disorders: Seek medical attention and bring these instructions.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Continue flushing during transport to hospital. Bring along these instructions.

Ingestion: Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring these instructions. Do not induce vomiting.

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

Symptoms/effects: See section 11 for more detailed information on health effects and symptoms.

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

Medical attention/treatments: Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media: Extinguish with foam, carbon dioxide, dry powder or water fog. Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards: In case of fire, toxic gases may be formed (COx, NOx).

5.3. Advice for firefighters

Protective equipment for fire-fighters: Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

In case of spills, beware of slippery floors and surfaces.

Protective equipment: Avoid inhalation of vapours and spray mist and contact with skin and eyes. For personal protection, see section 8.

Emergency procedures: No specific recommendations. For personal protection, see section 8.

6.2. Environmental precautions

Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Absorb spillage with non-combustible, absorbent material.

6.4. Reference to other sections

References: For personal protection, see section 8. For waste disposal, see section 13.
SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling advice: Avoid inhalation of vapours and contact with skin and eyes. Observe good chemical hygiene practices. Change contaminated clothing.

Technical measures: Work practice should minimise contact. Do not eat, drink or smoke when using the product.

Technical precautions: Mechanical ventilation may be required. Provide easy access to water supply and eye wash facilities.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in tightly closed original container in a dry and cool place.

7.3. Specific end use(s)

Specific use(s): No information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No occupational exposure limit assigned.

8.2. Exposure controls

Engineering measures: Provide adequate ventilation. Minimize the risk of inhalation of vapours.

Personal protection: Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Respiratory equipment: In case of inadequate ventilation and work of brief duration, use suitable respiratory equipment. It is recommended to use respiratory equipment with combination filter, type ABEK

Hand protection: Wear protective gloves. Nitrile gloves or rubber gloves are recommended. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.

Eye protection: Wear goggles/face shield.

Skin protection: Wear apron or protective clothing in case of contact.

Hygiene measures: Wash hands after handling. Wash contaminated clothing before reuse.

Environmental Exposure Controls: Not available.
## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Form</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Colour</strong></td>
<td>Yellow</td>
</tr>
<tr>
<td><strong>Odour</strong></td>
<td>Mild</td>
</tr>
<tr>
<td><strong>Odour threshold</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>9.6 (20°C) (68°F)</td>
</tr>
<tr>
<td><strong>Melting point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Boiling point</strong></td>
<td>&gt;100°C</td>
</tr>
<tr>
<td></td>
<td>&gt;212°F</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>&gt;100°C</td>
</tr>
<tr>
<td></td>
<td>&gt;212°F</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>Non-flammable</td>
</tr>
<tr>
<td><strong>Explosive limits</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Vapour pressure</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>1.055</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>Soluble in water</td>
</tr>
<tr>
<td><strong>Partition coefficient (n-octanol/water)</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature (°C):</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Decomposition temperature (°C):</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>Kinematic viscosity: 10 mm²/s (20°C) (68°F)</td>
</tr>
<tr>
<td><strong>Explosive properties</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Oxidising properties</strong></td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### 9.2. Other information

**Other data:** Volatile Organic Compound (VOC): 0 g/l (calculated)
SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
Reactivity: Cutting debris kept in closed container may develop gas. Keep cutting debris dry to avoid exothermic reaction.

10.2. Chemical stability
Stability: Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions
Hazardous Reactions: None under normal conditions.

10.4. Conditions to avoid
Conditions/materials to avoid: Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials
Incompatible materials: Strong oxidising substances, strong acids and strong bases.

10.6. Hazardous decomposition products
Hazardous decomposition products: In case of fire, toxic gases (CO, CO2, NOx) may be formed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects
Acute Toxicity (Oral): Based on available data, the classification criteria are not met.

- 1,2,3-Benzotriazole: LD₅₀ = 720 mg/kg (oral rat)
- 3-(2-Ethylhexyloxy)propylamine: LD₅₀ = 320 mg/kg (oral rat)
- 1,2-Ethanediamine, N,N,N',N'-tetramethyl-, polymer with 1,1'-oxybis[2-chloroethane]: LD₅₀ = 1951 mg/kg (oral rat)

Acute Toxicity (Dermal): Based on available data, the classification criteria are not met.

Acute Toxicity (Inhalation): Based on available data, the classification criteria are not met.

Skin Corrosion/Irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive Toxicity: Based on available data, the classification criteria are not met.

STOT - Single exposure: Based on available data, the classification criteria are not met.

STOT - Repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Inhalation: Vapours may cause drowsiness and dizziness.

Skin contact: Prolonged and frequent contact may cause redness and irritation.

Eye contact: May irritate and cause redness and pain.

Ingestion: May be absorbed in the body and cause dizziness, nausea and vomiting.
SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity: Harmful to aquatic life with long lasting effects.

1,2-Ethanediamine, N,N,N',N'-tetramethyl-, polymer with 1,1'-oxybis[2-chloroethane] = 0,37 (EC50 48 hours, Daphnia, mg/l)

1,2,3-Benzotriazole = 107 (EC50 48 hours, Daphnia, mg/l)

12.2. Persistence and degradability

Degradability: This product is expected to be not readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: Not determined.

1,2,3-Benzotriazole: log Pow 1,44

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT/vPvB: No information available.

12.6. Other adverse effects

Other adverse effects: No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues: Dispose of waste and residues in accordance with local authority requirements. Waste is classified as hazardous waste. Do not store cutting debris in closed container. See section 10.1.

EWC-code: 12 01 09

Contaminated packaging: Dispose of waste and residues in accordance with local authority requirements.
SECTION 14: TRANSPORT INFORMATION

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number
UN-No: -

14.2. UN proper shipping name
Proper Shipping Name: -

14.3. Transport hazard class(es)
Class: -

14.4. Packing group
PG: -

14.5. Environmental hazards
Marine pollutant: -
Environmentally Hazardous substance: -

14.6. Special precautions for user
Special precautions: None known.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
Transport in bulk: Not relevant.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.

15.2. Chemical Safety Assessment
CSA status: No chemical safety assessment has been carried out.
SECTION 16: OTHER INFORMATION

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

The following sections contain revisions or new statements:

The (*) indicates the changes made with respect to the previous version.

Approved by DHI.

Allan Vorup

Additional information: Classification according to Regulation (EC) No. 1272/2008:
Calculation method.

Wording of H-statements:

H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

Made by DHI - Environment and Toxicology, Agern Allé 5, DK-2970 Hørsholm, Denmark.