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

Product identifier

Product name: COOLI ADDITIVE
Cat. No. 49900073

Container size: 4 l

Relevant identified uses of the substance or mixture and uses advised against

Application: Additive for cutting fluid.

Details of the supplier of the safety data sheet

Supplier: Struers ApS
Pederstrupvej 84
DK-2750 Ballerup
Tel:+45 44 600 800

Responsible for material safety data sheet authoring: Responsible for material safety data sheet authoring: DHI

Any questions to the contents of this material safety data sheet should be sent to: struers@struers.dk

Emergency telephone number

National Capital Poison Center: 1-800-222-1222

Infotrac:
1-800-535-5053
Struers US:
1-440-871-0071

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA 2012: Based on available data the classification criteria are not met. Based on available data the classification criteria are not met.

Label elements

The substance/mixture does not meet the criteria for classification and labeling.

Other hazards

PBT/vPvB: No information available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

The following substances shall be indicated according to legislation:
SECTION 4: FIRST AID MEASURES

**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.

**Most important symptoms and effects, both acute and delayed**

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

**Indication of any immediate medical attention and special treatment needed**

Medical attention/treatments: Treat symptomatically.
SECTION 5: FIREFIGHTING MEASURES

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.

Special hazards arising from the substance or mixture

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

Advice for firefighters

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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

Protective equipment: Avoid inhalation of vapors 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.

Environmental precautions

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

Methods and material for containment and cleaning up

Spill Cleanup Methods: Absorb spillage with non-combustible, absorbent material.

Reference to other sections

References: For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

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

Technical measures: Work practice should minimize 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.

Conditions for safe storage, including any incompatibilities

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

Specific end use(s)

Specific use(s): No information available.
SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limits:

<table>
<thead>
<tr>
<th>CAS-No.:</th>
<th>Chemical name:</th>
<th>As:</th>
<th>Exposure limits:</th>
<th>Type:</th>
<th>Notes:</th>
<th>References:</th>
</tr>
</thead>
<tbody>
<tr>
<td>102-71-6</td>
<td>Triethanolamine</td>
<td>-</td>
<td>5 mg/m3</td>
<td>TWA</td>
<td>-</td>
<td>ACGIH</td>
</tr>
</tbody>
</table>

Exposure controls

Engineering measures: Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors.

Personal protection: Personal protection equipment should be chosen according to the ANSI 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

### 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>Color:</strong></td>
<td>Colorless</td>
</tr>
<tr>
<td><strong>Odor:</strong></td>
<td>Mild</td>
</tr>
<tr>
<td><strong>Odor 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>≥100°C</td>
</tr>
<tr>
<td></td>
<td>≥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>Explosion limits:</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Vapor pressure:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Vapor density:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Relative density:</strong></td>
<td>1.06</td>
</tr>
<tr>
<td><strong>Solubility:</strong></td>
<td>Miscible with water</td>
</tr>
<tr>
<td><strong>Partition coefficient (n-octanol/water):</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature (°F):</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Decomposition temperature (°F):</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td>Kinematic viscosity: 6 mm²/s (20°C) (68°F)</td>
</tr>
<tr>
<td><strong>Explosive properties:</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Oxidizing properties:</strong></td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### Other information

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

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

Chemical stability
Stability: Stable under normal temperature conditions.

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

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

Incompatible materials
Incompatible materials: Strong oxidizing substances, strong acids and strong bases.

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

SECTION 11: TOXICOLOGICAL INFORMATION

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

2,2’-(Methylimino)diethanol: LD50 = 1945 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 sensitization: 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.

National Toxicology Program (NTP): No.

IARC Cancer Review: Group 3 for Triethanolamine.

OSHA: No.

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

STOT - Single exposure: May cause damage to organs (kidneys) through prolonged or repeated exposure.

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: Vapors 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

**Toxicity**

**Ecotoxicity:** The hazardous properties of the product in the environment are considered to be limited.

2,2′-(Methylimino)diethanol = 230 (EC50 48 hours, Daphnia, mg/l)

**Persistence and degradability**

**Degradability:** The degradability of the product has not been stated.

**Bioaccumulative potential**

**Bioaccumulative potential:** Not determined.

2,2′-(Methylimino)diethanol: log Pow -1,08

**Mobility in soil**

**Mobility:** No data available.

**Results of PBT and vPvB assessment**

**PBT/vPvB:** No information available.

**Other adverse effects**

**Other adverse effects:** No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

**Waste treatment methods**

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

**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, DOT).

**UN number**

UN-No: -

**UN proper shipping name**

Proper Shipping Name: -

**Transport hazard class(es)**

Class: -

**Packing group**

PG: -

**Environmental hazards**

Marine pollutant: -

Environmentally Hazardous substance: -

**Special precautions for user**

Special precautions: None known.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Transport in bulk: Not relevant.
SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Special provisions: State and local regulation may apply.

All components of this product are listed or exempt from listing on the TSCA inventory.

NFPA Rating: Health:1 Fire:1 Reactivity:0 Other:-

SARA Section 302: No.
SARA Section 304: No.
SARA Section 313: No.
SARA (311/312) Hazard categories: No.

National regulation: The following lists have been checked:

Threshold Limit Values (2018), ACGIH, by the American Conference on Governmental Industrial Hygienists.
NIOSH Pocket Guide to Chemical Hazards.
The Code of Federal Regulation, Title 40, part 261.33. Identification and listing of hazardous waste.
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.

[Signature]

Allan Vorup

Additional information: Classification according to HCS 2012:
Calculation method.

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.