1. IDENTIFICATION

**Product identifier**

**Product name:** CORROZIP-LF

Cat. No. 49900038, 49900039

**Container size:** 1 l, 5 l

**Recommended use and restrictions on use**

**Application:** Low foaming additive for cutting fluid.

**Details of the supplier of the safety data sheet**

**Supplier:** Struers Ltd

7275 West Credit Avenue
Ontario L5N 5M9 Mississauga
Canada
Tel:+1 (905) 8148855

**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

**Emergency telephone number**

Alberta & NWT:
Poison & Drug Information Service (PADIS): 1-800-332-1414

British Columbia:
Drug and Poison Information Centre (DPIC): 604-682-5050 / 1-800-567-8911

Ontario:
Poison Centre: 1-800-268-9017

Québec:
Poison Control Centre: 1-800-463-5060

Infotrac:
1-800-535-5053

Struers CAN:
+1 (905) 8148855
(Only during office hours)
2. HAZARDS IDENTIFICATION

Classification of the hazardous product

WHMIS 2015:
- Skin Irritation — Category 2
- Eye Irritation — Category 2
- Specific Target Organ Toxicity — Repeated Exposure — Category 2

Label elements

Warning
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H373K May cause damage to organs (kidneys) through prolonged or repeated exposure.
P273 Avoid release to the environment.
P280 Wear protective clothing, gloves, eye and face protection.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P103 Read label before use.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P501 Dispose of contents/container in accordance with local regulations.

Other hazards
PBT/vPvB: No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures
The product contains: organic solvents and additives.
### WHMIS 2015:

<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>20-&lt;30</td>
<td>102-71-6</td>
<td>203-049-8</td>
<td>01-2119486482-31-xxxx</td>
<td>Triethanolamine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-&lt;10</td>
<td>111-46-6</td>
<td>203-872-2</td>
<td>01-2119457857-21-xxxx</td>
<td>2,2'-Oxybisethanol</td>
<td>Acute (Oral) Toxicity</td>
<td>Category 4 Target organ Toxicant, Repeated Exposure</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Skin Irritation Category 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Eye Irritation Category 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic Toxicity Category 3</td>
<td></td>
</tr>
<tr>
<td>5-&lt;10</td>
<td></td>
<td></td>
<td></td>
<td>Benzotriazolesodium salt</td>
<td>Acute (Oral) Toxicity</td>
<td>Category 4 Skin Irritation Category 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Eye Irritation Category 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic Toxicity Category 2</td>
<td></td>
</tr>
<tr>
<td>1-&lt;5</td>
<td></td>
<td></td>
<td></td>
<td>Carboxylic acids, neutralized with alkanolamines</td>
<td>Skin Irritation Category 2</td>
<td>Eye Irritation Category 2</td>
</tr>
<tr>
<td>&lt;=0,24</td>
<td>3811-73-2</td>
<td>223-296-5</td>
<td></td>
<td>Pyridine-2-thiol 1-oxide, sodium salt</td>
<td>Acute (Oral) Toxicity Category 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Acute (Dermal) Toxicity Category 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Acute (Inhalation) Toxicity Category 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Skin Irritation Category 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Eye Irritation Category 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Aquatic Acute Toxicity Category 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic Toxicity Category 1</td>
<td></td>
</tr>
<tr>
<td>&lt;0.1</td>
<td></td>
<td></td>
<td></td>
<td>Poly quaternary ammonium chloride</td>
<td>Acute (Oral) Toxicity Category 4</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Acute (Inhalation) Toxicity Category 4</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Aquatic Acute Toxicity Category 1</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic Toxicity Category 1</td>
<td>**</td>
</tr>
</tbody>
</table>

**Notes:**

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

**: M-factor (acute): 10; M-factor (chronic): 1
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 take along 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 take along 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.

**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.

5. FIRE-FIGHTING MEASURES

**Extinguishing media**

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

**Specific hazards arising from the hazardous product**

**Specific hazards:** During fire, health hazardous gases may be formed.

**Advice for fire-fighters**

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

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Protective equipment:** Avoid 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:** Dam and absorb spillage with sand, sawdust or other absorbent.

**Reference to other items**

**References:** For personal protection, see section 8. For waste disposal, see section 13.
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. Avoid inhalation of aerosols.

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Other provincial OEL’s may apply.

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>Quebec</td>
</tr>
<tr>
<td>102-71-6</td>
<td>Triethanolamine</td>
<td>-</td>
<td>0.5 ppm</td>
<td>3.1 mg/m³</td>
<td>TWA</td>
<td>Ont</td>
</tr>
</tbody>
</table>

Exposure controls

Engineering measures: Provide adequate ventilation. Observe occupational exposure limits and minimise the risk of inhalation of vapours.

Personal protection: Personal protection equipment should be chosen according to relevant 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. Use air-supplied respirator.

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.
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>Colour:</strong></td>
<td>The colour can vary slightly from batch to batch.</td>
</tr>
<tr>
<td><strong>Odour:</strong></td>
<td>Amine</td>
</tr>
<tr>
<td><strong>Odour threshold:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>pH:</strong></td>
<td>8.7-9.2</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><strong>Flash point:</strong></td>
<td>&gt;130°C</td>
</tr>
<tr>
<td><strong>Evaporation rate:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas):</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Explosion limits:</strong></td>
<td>Not available</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>1.14</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 available.</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>Viscosity: 17 mm²/s</td>
</tr>
<tr>
<td><strong>Explosive properties:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Oxidising properties:</strong></td>
<td>Not available</td>
</tr>
</tbody>
</table>

**Other information**

**Other data:** Volatile Organic Compound (VOC): 112 g/l (calculated)
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: No data available.

Conditions to avoid

Conditions/materials to avoid: No information available.

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.
11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

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

Acute Toxicity (Oral LD50): 2732 mg/kg (ATE)
ATE = Acute Toxicity Estimate.

2,2’-Oxydiethanol: LD50 = 12565 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: Causes skin irritation.

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.

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

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

Inhalation: Vapors may irritate throat and respiratory system and cause coughing. In high concentrations, vapors are narcotic and may cause headache, fatigue, dizziness and nausea.

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

Ecotoxicity

Ecotoxicity: Harmful to aquatic life with long lasting effects.

Pyridine-2-thiol 1-oxide, sodium salt: \(0.0088\) (EC50 48 hours, Daphnia, mg/l)

Persistence and degradability

Degradability: No data available.

Bioaccumulative potential

Bioaccumulative potential: No data available on bioaccumulation.

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.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues: Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. Do not store cutting debris in closed container. See section 10.1.

Contaminated packaging: Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
14. TRANSPORT INFORMATION
The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, TDG).

**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
15. REGULATORY INFORMATION

Safety, health and environmental regulations specific to the product

Special provisions: This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

DSL: All chemicals included in the product are DSL listed or exempt.

National regulation: Hazardous Products Regulations, with amendments.
Canadian Environmental Protection Act, Reporting for the Domestic Substances List (DSL), with amendments.
Ontario: Control of Exposure to Biological or Chemical Agents R.R.O. 1990, Reg. 833, with amendments (2016).
Quebec: Regulation respecting the quality of the work environment, with amendments (2013-12-13).
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: 6, 9. The (*) indicates the changes made with respect to the previous version.

Approved by DHI.

Additional information:
Classification according to WHMIS 2015:
Calculation method.
and
On basis of test data.

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.