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

Product identifier
Product name: CORROZIP
Cat. No. 49900045, 49900046
Container size: 1 L, 5 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: The product is not classified.

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

Other hazards
Contains 1,2-Benzisothiazolin-3-one. May produce an allergic reaction. (*)
Contains a substance/a group of substances with possible risk of harm to the unborn child and with possible risk of impaired fertility.

PBT/vPvB: Not Classified as PBT/vPvB by current EU criteria. (*)

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures
The product contains: Boric acid, salts, glycols and water. (*)
OSHA 2012:

<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>1-10</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 irritant Category 2A</td>
<td></td>
</tr>
<tr>
<td>&lt;5.5</td>
<td>10043-35-3</td>
<td>233-139-2</td>
<td>-</td>
<td>Boric acid</td>
<td>Category 1B reproductive toxicant</td>
<td>SCL</td>
</tr>
<tr>
<td>0.005-&lt;0.05</td>
<td>2634-33-5</td>
<td>220-120-9</td>
<td>-</td>
<td>1,2-Benzisothiazolin-3-one</td>
<td>Acute Oral Toxicity Category 4 Skin Irritant Category 2 Serious Eye Damage Category 1 Skin Sensitizer Category 1 Aquatic Acute Toxicity Category 1</td>
<td></td>
</tr>
</tbody>
</table>

Notes: SCL: Specific Concentration Limit

SECTION 4: FIRST AID MEASURES

**Description of first aid measures**

**Inhalation:** Move into fresh air and keep at rest. Get medical attention if any discomfort continues.

**Skin contact:** Remove contaminated clothes and rinse skin thoroughly with water.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

**Ingestion:** Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable take to hospital along with 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.

SECTION 5: FIREFIGHTING MEASURES

**Extinguishing media**

**Extinguishing media:** Extinguish with foam, carbon dioxide or dry powder. Do not use water as an extinguisher.

**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

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 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 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.

Technical measures:
Work practice should minimize contact.

Technical precautions:
Local exhaust is recommended.

Conditions for safe storage, including any incompatibilities

Storage conditions:
Store in tightly closed original container. Protect from freezing and direct sunlight.

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>-</td>
<td>Borate compounds, inorganic, inhalable fraction</td>
<td>-</td>
<td>2 mg/m³ TWA</td>
<td>A4</td>
<td>A4; Not Classifiable as a Human Carcinogen.</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td>-</td>
<td>6 mg/m³ STEL</td>
<td>A4; 15min</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:

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 use suitable respirator. It is recommended to use respiratory equipment with combination filter, type A2/P2.

Hand protection: Wear protective gloves. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection: Risk of contact: Wear goggles/face shield.

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

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>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>The color can vary slightly from batch to batch.</td>
</tr>
<tr>
<td>Odor</td>
<td>mild</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH</td>
<td>9.1 (23°C / 50 g/l)</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>Not relevant.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.08</td>
</tr>
<tr>
<td>Solubility</td>
<td>Miscible with water.</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature (°F)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature (°F)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Kinematic viscosity: 13 mm²/s (20°C)</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not considered to be explosive.</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Other information**

**Other data:** No information available.
SECTION 10: STABILITY AND REACTIVITY

Reactivity
Reactivity: No data available.

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 agents.

Hazardous decomposition products
Hazardous decomposition products: NOx, CO.
### SECTION 11: TOXICOLOGICAL INFORMATION

#### Information on toxicological effects

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity (Oral)</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Acute Toxicity (Dermal)</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Acute Toxicity (Inhalation)</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>National Toxicology Program (NTP): No.</td>
</tr>
<tr>
<td></td>
<td>I.A.R.C. Monographs: No.</td>
</tr>
<tr>
<td></td>
<td>OSHA: No.</td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>STOT - Single exposure</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>STOT - Repeated exposure</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Not relevant at normal room temperatures. When heated, irritating vapors may be formed.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Prolonged or frequent contact may cause redness, itching, eczema and skin cracking. The product contains a small amount of sensitizing substance which may provoke an allergic reaction among sensitive individuals in contact with skin.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>Splashes may irritate.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>May irritate and cause malaise.</td>
</tr>
<tr>
<td>Specific effects</td>
<td>Contains a substance/a group of substances with possible risk of harm to the unborn child and with possible risk of impaired fertility.</td>
</tr>
</tbody>
</table>
**SECTION 12: ECOLOGICAL INFORMATION**

**Toxicity**

Ecotoxicity: The product is not expected to be hazardous to the environment.

**Persistence and degradability**

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

**Bioaccumulative potential**

Bioaccumulative potential: No data available on bioaccumulation.

**Mobility in soil**

Mobility: No data available.

**Results of PBT and vPvB assessment**

PBT/vPvB: This product does not contain any PBT or vPvB substances. (*)

**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.

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.

TSCA: Not available.

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

SARA Section 302: No.  
SARA Section 313: No.  
SARA Section 304: 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: 2, 3, 6, 9, 12.
The (*) indicates the changes made with respect to the previous version.

Approved by DHI.

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.