

SAFETY DATA SHEET

CORROZIP-Cu



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : CORROZIP-Cu
Cat. No. : 49900068, 49900075
Container size : 1 l, 4 l
Product type : Liquid.
Other means of identification : Not available.

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

Product use : Additive for cutting fluid
Area of application : Professional applications.

Uses advised against

None identified.

1.3 Details of the supplier of the safety data sheet

Struers Ltd.
Unit 11 Evolution @ the AMP
Whittle Way
Catcliffe Rotherham S60 5BL
United Kingdom
Telephone: +44 (0) 845 604 6664
e-mail address of person responsible for this SDS : sdsquestions@struers.dk

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : NHS: 111

Supplier

Telephone number : +45 44 600 800 (Only during office hours)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to UK CLP/GHS

Eye Irrit. 2, H319
Skin Sens. 1, H317
Aquatic Chronic 3, H412

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

Ingredients of unknown toxicity : 5 percent of the mixture consists of component(s) of unknown acute inhalation toxicity

See Section 16 for the full text of the H statements declared above.



SECTION 2: Hazards identification

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms

:



Signal word

: Warning

Hazard statements

: H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

: P280 - Wear protective gloves. Wear eye or face protection.
P273 - Avoid release to the environment.
P261 - Avoid breathing vapour.

Response

: P302 + P352 - IF ON SKIN: Wash with plenty of water.
P362 + P364 - Take off contaminated clothing and wash it before reuse.

Storage

: Not applicable.

Disposal

: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients

: 2-n-butyl-benzo[d]isothiazol-3-one
1,2-benzisothiazol-3(2H)-one

Supplemental label elements

: Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

: Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings

: Not applicable.

Tactile warning of danger

: Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification

: None known.



SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Type
glycerol	UK (GB) REACH #: Annex V REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≤10	Not classified.	[2]
benzotriazole	UK (GB) REACH #: <1 tonne REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7	≤6.5	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411	[1]
2,2'-(methylinino)diethanol	REACH #: 01-2119488970-24 EC: 203-312-7 CAS: 105-59-9 Index: 603-079-00-5	≤5	Eye Irrit. 2, H319	[1]
2-n-butyl-benzo[d]isothiazol-3-one	UK (GB) REACH #: <1 tonne EC: 420-590-7 CAS: 4299-07-4 Index: 606-079-00-3	<0.25	Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
1,2-Ethanediamine, N1,N1,N2, N2-tetramethyl-, polymer with 1,1'-oxybis[2-chloroethane]	REACH #: Polymer EC: 608-578-1 CAS: 31075-24-8	≤0.15	Acute Tox. 4, H302 Acute Tox. 4, H332 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)	[1]
1,2-benzisothiazol-3(2H)-one	UK (GB) REACH #: <1 tonne REACH #: 01-2120761540-60 EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	<0.1	Acute Tox. 4, H302 Acute Tox. 2, H330 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) See Section 16 for the full text of the H statements declared above.	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.



SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.



SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use dry chemical or CO₂.

Unsuitable extinguishing media : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to British standard BS EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Dispose of via a licensed waste disposal contractor.



SECTION 6: Accidental release measures

Large spill : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
glycerol	EH40/2005 WELs (United Kingdom (UK), 1/2020) TWA 8 hours: 10 mg/m ³ . Form: Mist.

Biological exposure indices

No exposure indices known.



CORROZIP-Cu

SECTION 8: Exposure controls/personal protection

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: British Standard BS EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) British Standard BS EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) British Standard BS EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name

benzotriazole

Result

DNEL - General population - Short term - Oral

0.12 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Oral

0.12 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Dermal

0.12 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Inhalation

2.1 mg/m³

Effects: Systemic

DNEL - Workers - Long term - Inhalation

19 mg/m³

Effects: Systemic

DNEL - Workers - Long term - Dermal

1.08 mg/kg bw/day

Effects: Systemic

2,2'-(methylimino)diethanol

DNEL - General population - Long term - Dermal

0.03 mg/cm²

Effects: Local

DNEL - Workers - Long term - Dermal

0.05 mg/cm²

Effects: Local

DNEL - General population - Long term - Oral

0.13 mg/kg bw/day

Effects: Systemic



CORROZIP-Cu

SECTION 8: Exposure controls/personal protection

DNEL - General population - Long term - Inhalation

0.4 mg/m³

Effects: Systemic

DNEL - General population - Long term - Dermal

0.67 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Long term - Dermal

5.6 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Long term - Inhalation

7.9 mg/m³

Effects: Systemic

1,2-benzisothiazol-3(2H)-one

DNEL - General population - Long term - Dermal

0.345 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Long term - Dermal

0.966 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Inhalation

1.2 mg/m³

Effects: Systemic

DNEL - Workers - Long term - Inhalation

6.81 mg/m³

Effects: Systemic

DNEL - General population - Long term - Dermal

0.345 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Long term - Dermal

0.966 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Inhalation

1.2 mg/m³

Effects: Systemic

DNEL - Workers - Long term -



CORROZIP-Cu

SECTION 8: Exposure controls/personal protection

Inhalation

6.81 mg/m³

Effects: Systemic

PNECs

Product/ingredient name

1,2-benzisothiazol-3(2H)-one

Result

Soil

3 mg/kg

Fresh water

4.03 µg/l

Marine water

0.403 µg/l

Fresh water sediment

0.0499 mg/kg

Marine water sediment

0.00499 mg/kg

Sewage Treatment Plant

1.03 mg/l

8.2 Exposure controls

Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Recommended: Nitrile gloves. The breakthrough time must be greater than the end use time of the product.



SECTION 8: Exposure controls/personal protection

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: organic vapour filter (Type A) : A2
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Liquid.
- Colour** : Yellow.
- Odour** : Characteristic.
- Odour threshold** : Not available.
- Melting point/freezing point** : Not available.
- Initial boiling point and boiling range** : Not available.
- Flammability (solid, gas)** : Not available.
- Upper/lower flammability or explosive limits** : Not available.
- Flash point** : Closed cup: >100°C
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- pH** : 9.1 to 9.3
- Viscosity** : Dynamic (room temperature): Not available.
Kinematic (room temperature): 18.6 mm²/s
Kinematic (40°C): Not available.

Solubility(ies)	Media	Result
	water	Soluble

- Solubility in water** : Not available.
- Miscible with water** : Yes.
- Partition coefficient: n-octanol/ water** : Not applicable.
- Vapour pressure** : Not available.
- Evaporation rate** : Not available.
- Relative density** : 1.1



CORROZIP-Cu

SECTION 9: Physical and chemical properties

Vapour density	: Not available.
Explosive properties	: Not available.
Oxidising properties	: Not available.
Particle characteristics	
Median particle size	: Not applicable.

9.2 Other information

Physical/chemical properties comments	: No additional information.
---------------------------------------	------------------------------

SECTION 10: Stability and reactivity

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
10.4 Conditions to avoid	: No specific data.
10.5 Incompatible materials	: No specific data.
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	
glycerol	Rat - Oral - LD50 12600 mg/kg	<u>Toxic effects:</u> Behavioral - General anesthetic Behavioral - Muscle weakness Liver - Other changes
	Rabbit - Dermal - LD50 >18700 mg/kg	
2,2'-(methylimino)diethanol	Rabbit - Dermal - LD50 6220 mg/kg	
	Rat - Oral - LD50 4780 mg/kg	
1,2-Ethanediamine, N1,N1,N2, N2-tetramethyl-, polymer with 1,1'- oxybis[2-chloroethane]	Rat - Oral - LD50 1951 mg/kg	



CORROZIP-Cu

SECTION 11: Toxicological information

Rabbit - Dermal - LD50

>2000 mg/kg

Rat - Inhalation - LC50 Dusts and mists

2.9 g/m³ [4 hours]

1,2-benzisothiazol-3(2H)-one

Rat - Dermal - LD50

>2000 mg/kg

OECD 402 [Acute Dermal Toxicity]

Rat - Oral - LD50

454 mg/kg

OECD 401 [Acute Oral Toxicity]

Conclusion/Summary [Product] : Not available.

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
CORROZIP-Cu	8338.2	N/A	N/A	N/A	N/A
glycerol	12600	N/A	N/A	N/A	N/A
benzotriazole	500	N/A	N/A	N/A	N/A
2,2'-(methylimino)diethanol	4780	6220	N/A	N/A	N/A
1,2-Ethanediamine, N1,N1,N2,N2-tetramethyl-, polymer with 1,1'-oxybis[2-chloroethane]	1951	N/A	N/A	N/A	2.9
1,2-benzisothiazol-3(2H)-one	450	N/A	N/A	N/A	0.21

Skin corrosion/irritation

Conclusion/Summary [Product] : Not available.

Serious eye damage/eye irritation

Product/ingredient name

benzotriazole

Result

Rabbit - Eyes - Severe irritant

Amount/concentration applied: 100 mg

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Product/ingredient name

1,2-benzisothiazol-3(2H)-one

Result

Guinea pig - skin

Result: Sensitising

OECD 406 [Skin Sensitization]

Skin



CORROZIP-Cu

SECTION 11: Toxicological information

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Conclusion/Summary [Product] : Not available.

Reproductive toxicity

Product/ingredient name

2,2'-(methylimino)diethanol

Result

Rat - Male - Oral

1000 mg/kg - NOAEL

OECD 416 [Two-Generation
Reproduction Toxicity Study]

Rat - Male, Female - Oral

300 mg/kg - NOAEL

OECD 416 [Two-Generation
Reproduction Toxicity Study]

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
--------------------	--



CORROZIP-Cu

SECTION 11: Toxicological information

Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary [Product] : Not available.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name

glycerol

Result

Acute - LC50

Fish - *Leuciscus idus*
>10000 mg/l [96 hours]

Acute - EC50

Daphnia - *Daphnia magna*
>10000 mg/l [48 hours]

Acute - EC50

Micro-organism - *Pseudomonas putida*
>10000 mg/l [16 hours]

benzotriazole

Chronic - EC10

Algae - Green algae - *Desmodesmus subspicatus*
1.18 mg/l [72 hours]

Effect: Population
OECD

Chronic - EC10

Daphnia - Water flea - *Daphnia galeata*
Age: <24 hours

Effect: Reproduction
OECD



CORROZIP-Cu

SECTION 12: Ecological information

0.97 mg/l [21 days]

Acute - EC50

Daphnia - Water flea - *Daphnia galeata*

Age: <24 hours

15.8 mg/l [48 hours]

Effect: Intoxication
OECD

EC50

Micro-organism

940 mg/l [3 hours]

Acute - LC50

Fish

55 mg/l [96 hours]

2,2'-(methylimino)diethanol

Acute - LC50

Fish - *Leuciscus idus*

1466 mg/l [96 hours]

Acute - EC50

Daphnia - *Daphnia magna*

233 mg/l [48 hours]

Acute - EC50

Algae - *Desmodesmus subspicatus*

>100 mg/l [72 hours]

2-n-butyl-benzo[d]isothiazol-3-one

Acute - LC50

Fish - *rainbow trout*

0.15 mg/l [96 hours]

1,2-benzisothiazol-3(2H)-one

Acute - EC50

Micro-organism - *Sludge*

13 mg/l [3 hours]

OECD 209 [Activated Sludge,
Respiration Inhibition Test]

Conclusion/Summary [Product] : Not available.

12.2 Persistence and degradability

Product/ingredient name

Result

benzotriazole

Aerobic

0.8% [30 days] - Not readily

OECD 302A [Inherent
Biodegradability: Modified SCAS Test]

2,2'-(methylimino)diethanol

Aerobic

96% [18 days]

OECD 301A [Ready Biodegradability -
DOC Die-Away Test]

1,2-benzisothiazol-3(2H)-one

Aerobic

85% [63 days] - Not readily

OECD 301C [Ready Biodegradability -
Modified MITI Test (I)]

Conclusion/Summary [Product] : Not available.



CORROZIP-Cu

SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
glycerol	-	-	Readily
benzotriazole	-	-	Not readily
2,2'-(methylimino)diethanol	-	-	Readily
1,2-benzisothiazol-3(2H)-one	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
glycerol	-1.76	-	Low
benzotriazole	1.44	-	Low
2,2'-(methylimino)diethanol	-1.08	-	Low
2-n-butyl-benzo[d]isothiazol-3-one	2.86	-	Low
1,2-benzisothiazol-3(2H)-one	0.7	6.62	Low

12.4 Mobility in soil

Soil/water partition coefficient : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
glycerol	No	N/A	N/A	No	N/A	N/A	N/A
benzotriazole	No	N/A	N/A	No	N/A	N/A	N/A
2,2'-(methylimino)diethanol	No	N/A	N/A	No	N/A	N/A	N/A
2-n-butyl-benzo[d]isothiazol-3-one	No	N/A	N/A	No	N/A	N/A	N/A
1,2-Ethanediamine, N1,N1, N2,N2-tetramethyl-, polymer with 1,1'-oxybis [2-chloroethane]	No	N/A	N/A	No	N/A	N/A	N/A
1,2-benzisothiazol-3(2H)-one	No	N/A	No	No	No	N/A	No

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product



CORROZIP-Cu

SECTION 13: Disposal considerations

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

Waste catalogue

Waste code	Waste designation
16 05 08*	discarded organic chemicals consisting of or containing hazardous substances

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	Waste catalogue
Plastic bottles or jugs	15 01 02 plastic packaging

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	9006	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (benzotriazole)	-	-
14.3 Transport hazard class(es)	-	9	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	Yes.	No.	No.

Additional information

ADN : The product is only regulated as a dangerous good when transported in tank vessels.



CORROZIP-Cu

SECTION 14: Transport information

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
UK (GB)/REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product/ingredient name	%	Designation [Usage]
CORROZIP-Cu	≥90	3
decamethylcyclopentasiloxane	≤0.1	70
octamethylcyclotetrasiloxane	<0.01	70

Labelling : Not applicable.

Seveso Directive

This product is not controlled under the Seveso Directive.

EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals



CORROZIP-Cu

SECTION 15: Regulatory information

List name	Ingredient name	Status
Schedule III	Methyldiethanolamine	Listed

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety assessment : The supplier has not performed a chemical safety assessment for the substance/product.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms :

- ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
- ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
- ATE = Acute Toxicity Estimate
- GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = GB CLP-specific Hazard statement
- IATA = International Air Transport Association
- IMDG = International Maritime Dangerous Goods
- IMO = International Maritime Organization
- N/A = Not available
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
- RRN = REACH Registration Number
- SGG = Segregation Group
- vPvB = Very Persistent and Very Bioaccumulative

Key literature references and sources for data :

- UK CLP Regulation SI 2019/720; European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), concluded in Geneva on 30 September 1957 plus amendments (Uniform text: Journal of Laws 27/2009 pos. 162 plus amendments); European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN); Occupational exposure limits; International regulations

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]



CORROZIP-Cu

SECTION 16: Other information

Classification	Justification
Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412	Calculation method Calculation method Calculation method

Full text of abbreviated H statements

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
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.

Full text of classifications [CLP/GHS]

Acute Tox. 2	ACUTE TOXICITY - Category 2
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A

Training advice : Ensure operatives are trained to minimise exposures. Training staff on good practice.

Date of issue/ Date of revision : 20/03/2026

Date of previous issue : No previous validation

Version : 1

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

