Revision: 03.06.2025

Sicherheitsdatenblatt gemäß 1907/2006/EG, Artikel 31

Printing date 03.06.2025

Version number 4 (replaces version 3)

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

· 1.1 Product identifier

· Trade name: Mineralstoff Cu2

· UFI: FH81-60H0-C00F-4E2T

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

No further relevant information available.

- · Application of the substance / the mixture Corrosion inhibitors
- · 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

BWT Holding GmbH Walter-Simmer-Straße 4 A - 5310 Mondsee

AUSTRIA

Tel.: +43/6232/5011-0 Fax: +43/6232/4058 email: office@bwt.at

· Further information obtainable from:

Abteilung F&E - Chemikalienbeauftragte(r)

Tel.: +43/6232/5011-1893 +43/6232/5011-1427

email: msds-info@bwt-group.com
· 1.4 Emergency telephone number:

Poison center Vienna Tel.: +43/1-406 43 43

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Met. Corr.1 H290 May be corrosive to metals.

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



GHS05

- · Signal word Danger
- · Hazard-determining components of labelling:

sodium hydroxide

· Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

· Precautionary statements

P102 Keep out of reach of children.
 P234 Keep only in original packaging.
 P280 Wear protective gloves / eye protection.

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P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· PBT: This substance does not fulfil the PBT criteria of REACH, Annex XIII.

· vPvB: This substance does not fulfil the vPvB criteria of the REACH Regulation, Annex XIII.

· Determination of endocrine-disrupting properties

This product does not contain ingredients with endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1% (w/w) or more.

SECTION 3: Composition/information on ingredients

- · 3.2 Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 1310-73-2	sodium hydroxide	≥2,5-<5%
EINECS: 215-185-5	Met. Corr.1, H290; Skin Corr. 1A, H314 Specific concentration limits: Skin Corr. 1A; H314: C ≥ 5 % Skin Corr. 1B; H314: 2 % ≤ C < 5 % Skin Irrit. 2; H315: 0,5 % ≤ C < 2 % Eye Irrit. 2; H319: 0,5 % ≤ C	
	< 2 %	
CAS: 497-19-8	sodium carbonate	≥2,5-<10%
EINECS: 207-838-8 Reg.nr.: 01-2119485498-19-xxxx	() Eye Irrit. 2, H319	

[·] Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information:

Avoid contact with skin and eyes.

Immediately remove any clothing soiled by the product.

· After inhalation:

Supply fresh air.

Seek medical treatment in case of complaints.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Immediately rinse with water.

If symptoms occur, seek medical attention.

· After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

Remove any contact lenses if possible.

- After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

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• 4.3 Indication of any immediate medical attention and special treatment needed Treat symptomatically and supportively.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

Use fire extinguishing methods suitable to surrounding conditions.

CO2, extinguishing powder or water spray jet. Fight larger fires with a water spray jet or alcohol-resistant foam

- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment:

Mouth respiratory protective device.

Usual measures for fires involving chemicals.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes and skin.

Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

· 6.2 Environmental precautions:

Do not allow to enter sewers/surface or ground water.

Dilute with plenty of water.

· 6.3 Methods and material for containment and cleaning up:

Use neutralising agent.

Take up leaking material with non-combustible, absorbent material (e.g. sand, diatomaceous earth).

Ensure adequate ventilation.

Dispose contaminated material as waste according to section 13.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

- · 7.1 Precautions for safe handling Avoid aerosol formation.
- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Keep container tightly closed.

Store in a dry, clean room, closed container, cool and protected from direct sunlight.

- · Information about storage in one common storage facility: Store away from foodstuffs.
- · Further information about storage conditions: None.
- · Storage class: 8 B
- · Classification according to the German Ordinance on Industrial Safety and Health (BetrSichV): Substance or mixture corrosive to metals
- · 7.3 Specific end use(s) No further relevant information available.

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SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

CAS: 1310-73-2 sodium hydroxide

MAK (Germany) vgl.Abschn.IIb

Regulatory information MAK (Germany): MAK- und BAT-Liste

DNFL

CAS: 1310-73-2 sodium hydroxide

Inhalative	DNEL inhalativ	1 mg/m3 (general population)
		Possible health hazards: long term - local effects
		1 mg/m3 (worker)
		Possible health hazards: long term - local effects
CAS: 497-	19-8 sodium carl	bonate
Inhalative	DNFI inhalativ	10 mg/m3 (general normlation)

Inhalative	DNEL inhalativ	10 mg/m3 (general population) acute - local effects
		10 mg/m3 (worker) long term - local effects

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Respiratory protection:

For short-term or low exposure, use a respiratory filter device; for intensive or prolonged exposure, use self-contained breathing apparatus.

· Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Natural rubber, NR

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· Eve/face protection



Tightly sealed goggles

· Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Physical state Liquid Colourless · Colour: · Odour: **Odourless** · Odour threshold: Not determined. · Melting point/freezing point: Undetermined.

· Boiling point or initial boiling point and boiling

100 °C

· Flammability Not applicable.

· Lower and upper explosion limit

· Lower: Not determined. · Upper: Not determined. · Flash point: Not applicable. · Decomposition temperature: Not determined.

· pH at 20 °C 13,16

· Viscosity:

· Kinematic viscosity Not determined. · Dynamic: Not determined.

·Solubility

· water: Fully miscible. · Partition coefficient n-octanol/water (log value) Not determined. Not determined.

· Vapour pressure:

· Density and/or relative density

· Density at 20 °C: $1,1016 \text{ g/cm}^3$ · Relative density Not determined. · Vapour density Not determined.

· 9.2 Other information

· Appearance:

· Form: Fluid

· Important information on protection of health and

environment, and on safety.

· Ignition temperature: Product is not selfigniting.

· Explosive properties: Product does not present an explosion hazard.

· Solvent content:

90,1% · Water: · VOC (EC) 0,00%

· Change in condition

· Evaporation rate Not determined.

· Information with regard to physical hazard classes

Explosives Void · Flammable gases Void · Aerosols Void Void · Oxidising gases · Gases under pressure Void · Flammable liquids Void

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· Flammable solids	Void
· Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
· Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable	le
gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	May be corrosive to metals.
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- · 10.1 Reactivity The product shows no reactivity under normal conditions of storage, transport and use.
- · 10.2 Chemical stability The product is stable under normal storage conditions.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid

No hazardous reactions are known if handled as directed.

Heat exposure

- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC5	0 value	es relevant for classification:
CAS: 13	310-73-	2 sodium hydroxide
Oral	<i>LD50</i>	2.000 mg/kg (rat)
CAS: 49	7-19-8	sodium carbonate
		2.800 mg/kg (rat)
Dermal	LD50	>2.000 mg/kg (rabbit)
1		l-1 polyphosphoric acids, sodium salts
		6.600 mg/kg (rat)
Dermal	LD50	>7.940 mg/kg (rabbit)

- · Primary irritant effect:
- · Skin corrosion/irritation

Causes severe skin burns and eye damage.

- · Serious eye damage/irritation Causes serious eye damage.
- · 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.

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· 11.2 Information on other hazards

· Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic to	xicity:	
CAS: 1310	0-73-2 sodium hydroxide	
EC50	40,4 mg/L /48h (daphnia)	
LC50/96h	LC50/96h 125 mg/l (fish)	
CAS: 497-	19-8 sodium carbonate	
EC50	200-227 mg/L /48h (Ceriodaphnia dubia)	
LC50/96h	LC50/96h 300 mg/l (Lepomis macrochirus)	
CAS: 6891	15-31-1 polyphosphoric acids, sodium salts	
EC50	>485 mg/L (daphnia)	
	(48h)	
LC50/96h	>1.000 mg/l (reg)	

- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil The product is water-soluble.
- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

- · 12.7 Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Rinse off of bigger amounts into drains or the aquatic environment may lea

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Product residues must be disposed of in accordance with national and regional regulations.

Leave chemicals in original containers.

Do not mix with other waste. Uncleaned containers must be treated in accordance with the product. Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European	· European waste catalogue	
06 02 04*	06 02 04* sodium and potassium hydroxide	
HP4	Irritant - skin irritation and eye damage	

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- · Uncleaned packaging:
- · Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning. • Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information	
14.1 UN number or ID number ADR, IMDG, IATA	UN1824
14.2 UN proper shipping name ADR IMDG, IATA	1824 SODIUM HYDROXIDE SOLUTION SODIUM HYDROXIDE SOLUTION
14.3 Transport hazard class(es)	
ADR, IMDG, IATA	
Class Label	8 Corrosive substances. 8
14.4 Packing group ADR, IMDG, IATA	II
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user Hazard identification number (Kemler code): EMS Number: Segregation groups Stowage Category Segregation Code	Warning: Corrosive substances. 80 F-A,S-B (SGG18) Alkalis A SG35 Stow "separated from" SGG1-acids
14.7 Maritime transport in bulk according to IM	10
instruments	Not applicable.
Transport/Additional information:	
ADR Limited quantities (LQ) Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
Transport category Tunnel restriction code	2 E
IMDG Limited quantities (LQ) Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II

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SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



- · Signal word Danger
- · Hazard-determining components of labelling:

sodium hydroxide

· Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

· Precautionary statements

P102 Keep out of reach of children.
 P234 Keep only in original packaging.
 P280 Wear protective gloves / eye protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

None of the ingredients is listed.

- · REGULATION (EU) 2019/1148
- · Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

- · National regulations:
- · Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This safety data sheet complies with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

· Relevant phrases

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

· Date of previous version: 02.06.2025

· Version number of previous version: 3

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Met. Corr.1: Corrosive to metals – Category 1

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

* Data compared to the previous version altered.