



Availa Cu 100

SECTION 1: IDENTIFICATION

1.1. Product identifier

Trade name Availa Cu 100
Product no. Availa Cu 100 US / Multiple

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

Relevant identified uses of the substance or mixture Nutritional feed ingredient
Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Company and address

ZINPRO

10400 Viking Drive, Suite 240
MN 55344 Eden Prairie
USA
Tel: + 01 952-983-4000
www.zinpro.com
zinpro@zinpro.com
12/15/2022
1.0

E-mail

SDS date

SDS Version

1.4. Emergency telephone number

Contact the poison control at 1-800-222-1222 (24/7) or use the webPOISONCONTROL® (triage.webpoisoncontrol.org) to get specific guidance for your case
See also section 4 "First aid measures".

SECTION 2: HAZARD(S) IDENTIFICATION

OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Classification of the substance or mixture

Skin Irrit. 2; H315, Causes skin irritation.
Eye Irrit. 2; H319, Causes serious eye irritation.

2.2. Label elements

Hazard pictogram(s)



Signal word

Hazard statement(s)

Warning
Causes skin irritation. (H315)
Causes serious eye irritation. (H319)

Safety statement(s)

General

Prevention

Response

Storage

Disposal

Additional labelling

-
Wash hands thoroughly after handling. (P264)
Wear eye protection/protective gloves/protective clothing. (P280)
If eye irritation persists: Get medical advice/attention. (P337+P313)

-

-

Not applicable.

2.3. Other hazards

Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS



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3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Copper amino acid complex (as copper)	CAS No.:	10-15%	Acute Tox. 3, H301 (ATE: 244.00 mg/kg)	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

None known.

SECTION 4: FIRST-AID MEASURES

4.1. Description of first aid measures

General information

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

IF ON SKIN: Wash with plenty of water and soap.

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 5 minutes and continue until irritation stops. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

Ingestion

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns

Not applicable.

4.2. Most important symptoms and effects, both acute and delayed

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Information to medics

If eye irritation persists: Get medical advice/attention.

Bring this safety data sheet or the label from this product.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO₂)



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5.3. Advice for firefighters

Some metal oxides

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the Poison Help Line on 1-800-222-1222 (24/7) in order to obtain further advice.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

6.3. Methods and material for containment and cleaning up

Minor spills are collected with a cloth. Collection and disposal of the material shall be done with minimum creation of dust. Sweep and collect. Shall be contained in suitable and tightly closed disposal containers. Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Smoking, drinking and consumption of food is not allowed in the work area. See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Powder trickling out onto the floor or onto other containers must be prevented.

Recommended storage material

Keep only in original packaging.

Storage temperature

Dry, cool and well ventilated

Incompatible materials

Strong acids
Strong oxidizing agents

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Copper amino acid complex (as copper)
Long term exposure limit (OSHA Table Z-1) (mg/m³): 0,1 (Fume (as Cu))
Long term exposure limit (ACGIH TLV) (mg/m³): 0.2 (Fume (as Cu)) / 1 (Dusts and mists (as Cu))
Long term exposure limit (NIOSH REL) (mg/m³): 0.1 (Fume (as Cu)) / 1 (Dusts and mists (as Cu))
Part 1910 - Occupational Safety and Health Standards (29 CFR 1910.1000 TABLE Z-1 - Limits for Air Contaminants)

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.
Smoking, drinking and consumption of food is not allowed in the work area. There are no exposure scenarios implemented for this product. Professional users are subjected to the legally set maximum concentrations for

General recommendations
Exposure scenarios
Exposure limits

Appropriate technical measures

occupational exposure. See occupational hygiene limit values above.
Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and showers are clearly marked.
Take off contaminated clothing and wash it before reuse.

Hygiene measures

Measures to avoid environmental exposure


No specific requirements.

8.3. Individual protection measures, such as personal protective equipment


Generally

Use only protective equipment with a recognized certification mark, e.g. the UL mark.


Respiratory Equipment

Work situation	Type	Class	Colour	Standards	
In case of inadequate ventilation	Combination filter A2P2	Class 2	Brown/White	EN14387	


Skin protection

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn.	-	-	

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Cotton/Latex	-	> 240	EN374-2, EN374-3, EN388	

Eye protection

Type	Standards	
Safety glasses with side shields.	EN166	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	Granulate
Colour	Deep brown
Odour	Sweet
Odour threshold (ppm)	Testing not relevant or not possible due to the nature of the product.
pH	Testing not relevant or not possible due to the nature of the product.
Density (g/cm ³)	Testing not relevant or not possible due to the nature of the product.
Viscosity	Does not apply to solids.
Phase changes	
Melting point (°F)	Not applicable - risk of decomposition
Boiling point (°F)	Does not apply to solids.
Vapour pressure	Testing not relevant or not possible due to the nature of the product.
Vapour density	Does not apply to solids.
Decomposition temperature (°F)	-



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Decomposition temperature (°C)	260
Data on fire and explosion hazards	
Flash point (°F)	Not applicable - flash point > 200°C
Ignition (°F)	Testing not relevant or not possible due to the nature of the product.
Auto flammability (°F)	Not applicable - flash point > 200°C
Explosion limits (% v/v)	Does not apply to solids.
Solubility	
Solubility in water	Active substance is water soluble. Carrier is insoluble.
n-octanol/water coefficient	Testing not relevant or not possible due to the nature of the product.
9.2. Other information	
Solubility in fat (g/L)	Testing not relevant or not possible due to the nature of the product.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity	No data available.
10.2. Chemical stability	The product is stable under the conditions, noted in section 7 "Handling and storage".
10.3. Possibility of hazardous reactions	None known.
10.4. Conditions to avoid	None known.
10.5. Incompatible materials	Strong acids Strong oxidizing agents
10.6. Hazardous decomposition products	The product is not degraded when used as specified in section 1.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects	
Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory sensitisation	Based on available data, the classification criteria are not met.
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.
Long term effects	Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.
Other information	None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity	No data available.
12.2. Persistence and degradability	No data available.
12.3. Bioaccumulative potential	No data available.
12.4. Mobility in soil	No data available.
12.5. Results of PBT and vPvB assessment	This mixture/product does not contain any substances considered to meet the

12.6. Other adverse effects

criteria classifying them as PBT and/or vPvB.

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)

None of the components are listed




Specific labelling

Not applicable.

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: TRANSPORT INFORMATION

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information
DOT	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	Class: 9 Labels: 9 Classification code: M7 	III	No	Limited quantities: 5 kg Tunnel restriction code: (-) See below for additional information.
IMDG	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	Class: 9 Labels: 9 Classification code: M7 	III	No	Limited quantities: 5 kg EmS: F-A S-F See below for additional information.
IATA	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	Class: 9 Labels: 9 Classification code: M7 	III	No	See below for additional information.

* Packing group

** Environmental hazards

Additional information

These substances when carried in single or combination packaging's containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of ADR/IMDG/IATA provided the packaging's meet the general provisions of 4.1.1.1, 4.1.1.2, 4.1.1.4 - 4.1.1.8 (ADR, IMDG) / 5.0.2.4.1, 5.0.2.6.1.1, 5.0.2.8 (IATA).

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ADR / See Table A, Section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.



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14.6. Special precautions for user

This product is within scope of the regulations of transport of dangerous goods.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

No data available.

SECTION 15: REGULATORY INFORMATION

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

15.2. U.S. Federal regulations

TSCA

Clean Air Act

EPCRA Section 302

EPCRA Section 304

EPCRA section 313

CERCLA

Copper amino acid complex (as copper) is listed in the non-confidential portion

Copper amino acid complex (as copper) is regulated as a hazardous air pollutant (HAPS)

None of the components are listed

None of the components are listed

Copper amino acid complex (as copper) is listed

Copper amino acid complex (as copper) is regulated with a Reportable Quantity (RQ) of: 5000 pounds

State regulations

California / Prop. 65

Massachusetts / Right To Know Act

New Jersey / Right To Know Act

None of the components are listed

Copper amino acid complex (as copper) is listed

Copper amino acid complex (as copper) / Substance number: 0528

New York / Right To Know Act

Copper amino acid complex (as copper) is listed

Copper amino acid complex (as copper) is regulated with a Reportable Quantity (RQ) of: 5000* pounds

Copper amino acid complex (as copper) is regulated with a Threshold Reporting Quantity (TRQ) of: 100 pounds

Pennsylvania / Right To Know Act

Copper amino acid complex (as copper) is listed

Copper amino acid complex (as copper) is hazardous to the environment (E)

15.4. Restrictions for application

Restricted to professional users.

15.5. Demands for specific education

No specific requirements.

15.6. Additional information

Not applicable.

15.7. Chemical safety assessment

No

15.8. Sources

OSHA Hazard Communication Standard (29 CFR 1910.1200)

SECTION 16: OTHER INFORMATION

Full text of H-phrases as mentioned in section 3

H301, Toxic if swallowed.

The full text of identified uses as mentioned in section 1

None known.

Abbreviations and acronyms

ACGIH = American Conference of Governmental Industrial Hygienists

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

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CERCLA = Comprehensive Environmental Response Compensation and Liability Act



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EINECS = European Inventory of Existing Commercial chemical Substances
EPCRA = Emergency Planning and Community Right-To-Know Act
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
HCIS = Hazardous Chemical Information System
IARC = International Agency for Research on Cancer
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
NFPA = National Fire Protection Association
NIOSH = National Institute for Occupational Safety and Health
OECD = Organisation for Economic Co-operation and Development
OSHA = Occupational Safety and Health Administration
PBT = Persistent, Bioaccumulative and Toxic
RCRA = Resource Conservation and Recovery Act
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SARA = Superfund Amendments and Reauthorization Act
SCL = A specific concentration limit.
STEL = Short-term exposure limits
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TSCA = The Toxic Substances Control Act
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The safety data sheet is validated by

Other

The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by HCS (29 CFR 1910.1200).

Amy Reid

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: US-en