

In accordance with directive 1907/2006/EC, 2020/878

Version 4.0

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Trade name: Bronze powder natural

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

1.1 Product identification:

Product name: Bronze powder natural.

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

Relevant identified uses of the substance or mixture: Intermediate

Additional component

Uses advised against:

No further relevant information available.

1.3 Details of the supplier of the safety data sheet

Responsible distributor :

ASSYST bvba / A.S.O.W. bvba

Hellegatstraat 13a

2590 Berlaar

Belgium

Tel: +32 495 50 61 14 / +32 496 83 70 27

Website: www.assyst.org / www.artsuppliesonweb.com

Email: ao@assyst.org / vera.opsommer@assyst.org

1.4 Emergency telephone number:

For Belgium:

Call the **Poison Control Center (070 245 245 - free)**, if not available: **02 264 96 30** (normal rate) or your doctor. In life-threatening situations, always call the European emergency number **112**.

NHS 24 Direct

For help from a GP, visit your GP surgery's website, use an online service to contact your GP, or call the surgery. **For urgent medical help**, use the NHS 111 online service, or **call 111** if you are unable to get help online. **For life-threatening emergencies, call 999** for an ambulance. There is more information about getting medical help on the NHS website.

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture:

Classification according to Directive (EC) No 1272/2008 and its amendments.

Aquatic Acute 1 - H400 Very toxic to aquatic organisms.

Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements:

The product is classified and labelled according to the Globally Harmonised System (GHS).

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



Hazard pictograms:

GHS09

Signal word:

Warning

Hazard warnings

H410 Very toxic to aquatic life with long lasting effects.

Safety advice

P273 Avoid release to the environment.

P391 Absorb spillages.

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

2.3 Other hazards:

Inhalation of dust or fumes will cause irritation of the respiratory tract. Inhalation of higher concentrations may cause fever.

Results of PBT and vPvB assessment:

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PBT: Not applicable.

vPvB: Not applicable.

Determination of endocrine-disrupting properties:

None

SECTION 3: Composition and information on ingredients

3.2 Mixtures:

Description:

Alloy consisting of the substances listed below.

Hazardous ingredients:

Chemical Name	Cas No. EC No/List Registration number	Layout (Regulation (EC) No 1272/008)	Concentration (%)
Copper	CAS: 7440-50-8 EINECS: 231-159-6 Reg. No: 01-2119480154-42	Aquatic Acute 1, H400 (M=1); Aquatic Chronic 2, H411	> 50.0%
Tin	CAS: 7440-31-5 EINECS: 231-141-8 Reg. No: 01-2119486474-28	Non-hazardous components	1 - 50%
Zinc	CAS: 7440-66-6 EINECS: 231-175-3 Reg. No: 01-2119467174-37	Aquatic Acute 1, H400 (M=1); Aquatic Chronic 1, H410 (M=1)	0 - 2,5%

Full text of abbreviations can be found in section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures:

General information:

No special measures required.

After inhalation:

Supply fresh air, consult a doctor in case of complaints.

After skin contact:

Wash skin with water/shower.

In general, the product is not irritating to the skin.

After eye contact:

Rinse the opened eye with running water for several minutes.

Consult a doctor if the symptoms persist.

After ingestion:

Consult a doctor if the symptoms persist.

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

No further relevant information available.

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

No further relevant information available.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media:

Suitable extinguishing media:

Special powder for metal fires.

Dry sand.

Unsuitable extinguishing media:

Do not use water.

5.2 Special hazards arising from the substance or mixture

Specific firefighting hazards:

No further relevant information available.

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5.3 Advice for firefighters:

Special protective equipment:

No special measures required.

SECTION 6: Accidental release measures for the substance or mixture

6.1 Personal precautions, protective equipment and emergency procedures:

Personal precautions :

Prevent dust formation.

Wear personal protective clothing.

Do not breathe dust/fume/mist.

6.2 Environmental precautions:

Environmental precautions:

Do not allow to enter sewers/surface water/groundwater.

6.3 Methods and material for containment and cleaning up

Cleaning methods:

Mechanical pick-up.

6.4 Reference to other sections:

See chapter 7 for information on safe use.

See section 8 for information on personal protective equipment.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling

Advice on safe handling:

Avoid dust formation.

Advice on fire and explosion protection :

No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and containers:

Store in a cool, dry place in tightly closed containers.

Advice for mixed storage:

Do not store together with oxidising and acidic substances.

Further information on storage conditions:

None.

7.3 Specific end use:

No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:

Ingredients with limit values that require monitoring at the workplace:

7440-50-8 copper

WEL: Short-term value: 2** mg/m³
Long-term value: 0.2* 1** mg/m³
*fume **dusts and mists (as Cu)

DNELs

Copper:

Short-term DNEL (human, systemic effects): 0.082 mg Cu/kg B wt/d

Long-term DNEL (human, systemic effects): 0.041 mg Cu/kg B wt/d

Short-term NOAEL (human, oral, drinking water): 4 mg/l

PNECs

Copper:

PNEC aqua (freshwater): 7.8 µg/l

PNEC aqua (marine water): 5.2 µg/l

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PNEC sediment (freshwater): 87 mg Cu/kg dry weight

PNEC sediment (marine water): 676 mg Cu/kg dry weight

Additional information:

The lists valid during the making were used as basis.

8.2 Exposure controls:

Appropriate engineering controls:

No further data; see item 7.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

Wash hands before breaks and at the end of work.

Respiratory protection:

Suitable respiratory protective device recommended.

Filter P1 / P2 / P3

Hand protection:

Preventive skin protection by use of skin-protecting agents is recommended.

Protective gloves

Eye/face protection:

Goggles recommended during refilling

Body protection:

Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

General Information

Physical state:	Solid
Colour:	Bronze coloured
Odour:	Odourless
Melting point/freezing point:	700-1083°C
Boiling point or initial boiling point and boiling range:	Undetermined.
Flammability:	Product is not flammable.
Lower and upper explosion limit:	Not applicable
Flash point:	Not applicable
Ignition temperature:	Not applicable
Decomposition temperature:	Not applicable
pH:	Not applicable
Viscosity:	Not applicable

Solubility

Water:	Insoluble.
Partition coefficient n-octanol/water (log value):	Not applicable
Vapour pressure:	Not applicable

Density and/or relative density

Density at 20°C:	8.0-8.9 g/cm ³
Bulk density:	2.5-5.5 g/cm ³
Relative gas density:	Not applicable

Particle characteristics

Particle size:	1-500 µm
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9.2 Other information

Appearance:

Form:	Powder
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Information with regard to physical hazard classes

Explosives :	Void
Flammable gases :	Void

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Aerosols :	Void
Oxidising gases:	Void
Gases under pressure:	Void
Flammable liquids :	Void
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 gases in contact with water:	Void
Oxidising liquids:	Void
Oxidising solids:	Void
Organic peroxides:	Void
Corrosive to metals:	Void
Desensitised explosives:	Void

SECTION 10: Stability and reactivity

10.1 Reactivity:

No further relevant information available.

10.2 Chemical Stability:

Thermal decomposition / conditions to be avoided:

No decomposition if stored and handled as directed.

10.3 Potentially hazardous reactions:

Hazardous reactions:

Reacts with acids, alkalis and oxidising agents.

10.4 Conditions to avoid

No further relevant information available.

10.5 Chemically Interacting Materials:

No further relevant information available.

10.6 Hazardous decomposition products:

No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

Acute toxicity

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

LD/LC50 values relevant for classification:

None.

Skin corrosion/irritation.

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

Serious eye damage/irritation

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

Respiratory tract/skin sensitisation

Based on the 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

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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.

Additional toxicological information:

Inhalation of dust or smoke causes irritation of the respiratory tract.

Inhalation of higher concentrations may cause fever.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

No further relevant information available.

11.2 Information on other hazards

Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity:

Aquatic toxicity:

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

12.2 Persistence and Degradability:

No further relevant information available.

12.3 Bioaccumulation:

No further relevant information available.

12.4 Mobility in Soil:

No further relevant information available.

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 Harmful Effects:

Additional ecological information:

General notes:

Do not allow product to reach ground water, water course or sewage system.

SECTION 13: Instructions for disposal

13.1 Waste treatment methods:

Recommendation:

Contact the manufacturer for recycling.

Must not be disposed of together with household rubbish. Do not allow to enter the sewage system.

Uncleaned packaging:

Recommendation:

Dispose of in accordance with official regulations.

SECTION 14: Information relating to carriage

14.1 UN number

ADR, IMDG, IATA UN3077

14.2 Proper load name according to UN Model Regulations

ADR	3077 ENVIRONMENTALLY DANGEROUS SUBSTANCE, N.O.S (copper) 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper), MARINE POLLUTANT
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper)

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14.3 Transport hazard class(es)

ADR, IMDG, IATA Class 9 Miscellaneous dangerous substances and articles

Danger label 9

14.4 Packing group

ADR, IMDG, IATA III

14.5 Environmental hazards

Pollutant in the sea: Yes

Symbol (fish and tree)

Special labelling (ADR): Symbol (fish and tree)

Special labelling (IATA): Symbol (fish and tree)

14.6 Special precautions for the user

User warning: Miscellaneous hazardous substances and objects

Hazard identification number (Kemler code): 90

EMS number: F-A,S-F

Segregation groups not applicable

Storage category A

Stowage code SW23 For transport in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

Transport/ further information:

These substances, when contained in individual or combination packagings of a net mass not exceeding 5 kg each or within a package are not subject to the other provisions of ADR/RID/IMDG, provided the packagings meet the general requirements of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

ADR

Exempted quantities (EQ) E1

Limited quantity (LQ) 5 kg

Exceptional Quantity (EQ) Code: E1

Maximum net quantity per inner packaging : 30 g

Maximum net quantity per outer packaging 1000 g

Transport category 3

Tunnel restriction code -

IMDG

Limited quantities (LQ) 5 kg

Exceptional Quantity (EQ) Code: E1

Maximum net quantity per inner packaging 30 g

Maximum net quantity per outer packaging 1000 g

UN 'Model Regulations': UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.E.G., 9, III

SECTION 15: Legally required information

15.1 Safety, health and environmental regulations and legislation specific to the substance or mixture

Directive 2012/18/EU

Volume threshold (tonnes) for use in lower-tier establishments

100 t

Volume threshold (tonnes) for use in upper tier establishments

200 t.

National regulations:

Water hazard class:

Water hazard class 2 (Self-assessment): clearly 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

The information is based on our current state of knowledge, but does not constitute a guarantee for the product characteristics and does not establish a contractual legal relationship.

Relevant phrases

(serves as the explanation for only the hazard phrases noted in this SDS, e.g. in chapter 3)

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.

Data sheet issue area:

Management of safety data sheets

Telephone: +49 (0) 9152 / 9211 -846

E-mail: sdb@ecka-granules.com

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport 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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 per cent

LD50: Lethal dose, 50 per cent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Aquatic Acute 1: Aquatic Acute - category 1

Aquatic Chronic 1: Harmful to aquatic organisms - long-lasting harmful to aquatic organisms - Category 1

Aquatic Chronic 2: Harmful to aquatic organisms - long-lasting harmful to aquatic organisms - Category 2