GOLD LEAF AND METALLIC POWDERS

In The Family Of NEUBERG & NEUBERG IMPORTERS GROUP INC.

Safety Data Sheet

Issue Date: 30/06/2022

Revision nr: 1.0
Revision date: 30/06/2022
Supersedes: -

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

1.1. Product identifier

Trade name : Gold Bronze Powders (Rich Pale Gold / Pale Gold / Ducate Gold) (zinc <25%)

Product form : Mixture

Product code : BEGOLD* or GOLDIP or GOLDING* or BRIGOLD*
Deep Gold Oxidized #21

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

1.2.1. Relevant identified uses

Main use category : Industrial use,Professional use

Use of the substance/mixture : Coatings and paints
printing inks

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Distributed By:
Gold Leaf and Metallic Powders
6001 Santa Monica Boulevard
Los Angeles, CA 90038 USA
info@glandmp.com - www.glandmp.com

1.4. Emergency telephone number

Emergency number : +32 (0)475 38 36 83
This telephone number is available 24 hours per day, 7 days per week.

Country	Official advisory body	Address	Emergency number
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Aquatic Acute 1 H400

Aquatic Chronic 2 H411

Full text of H- and EUH-statements: see section 16

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS09

Signal word : Warning
Contains : copper, zinc powder— zinc dust (stabilised)
Hazard statements (CLP) : H410 - Very toxic to aquatic life with long lasting effects.
Precautionary statements (CLP) : P273 - Avoid release to the environment.
P391 - Collect spillage.
P501 - Dispose of contents and container to an approved waste disposal plant.

2.3. Other hazards

Other hazards : Results of PBT and vPvB assessment : Not applicable. Risk of dust explosion.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
copper	(CAS-No.) 7440-50-8 (EC-No.) 231-159-6 (EC Index) 029-024-00-X (REACH-no) 01-2119480154-42-xxxx	75 – 90	Aquatic Acute 1, H400 Aquatic Chronic 2, H411
zinc powder— zinc dust (stabilised)	(CAS-No.) 7440-66-6 (EC-No.) 231-175-3 (EC Index) 030-001-01-9 (REACH-no) 01-2119467174-37-XXXX	10 - <25	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

Additional advice : First aider: Pay attention to self-protection!. Concerning personal protective equipment to use, see section 8. Never give anything by mouth to an unconscious person. In case of doubt or persistent symptoms, consult always a physician. Show this safety data sheet to the doctor in attendance.

Inhalation	:	Remove casualty to fresh air and keep warm and at rest. Give oxygen or artificial respiration if necessary. In case of doubt or persistent symptoms, consult always a physician.
Skin contact	:	Remove contaminated clothing and shoes. Gently wash with plenty of soap and water. In case of doubt or persistent symptoms, consult always a physician.
Eyes contact	:	Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. In case of doubt or persistent symptoms, consult always a physician.
Ingestion	:	Rinse mouth thoroughly with water. Get medical advice/attention.

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

Inhalation	:	Inhalation of dust may cause irritation of the respiratory system.
Skin contact	:	Contact with dust may cause mechanical irritation or drying of the skin.
Eyes contact	:	Dust may cause painful eye irritation and tearing.
Ingestion	:	May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Foam. ABC-powder. Carbon dioxide. Dry sand.
Unsuitable extinguishing media	:	Water.

5.2. Special hazards arising from the substance or mixture

Specific hazards	:	Not flammable. Risk of dust explosion.
Hazardous decomposition products in case of fire	:	Metal oxides.

5.3. Advice for firefighters

Firefighting instructions	:	Evacuate area. Use water spray or fog for cooling exposed containers. Contain the extinguishing fluids by bunding. Prevent fire fighting water from entering the environment. Avoid dust formation.
Protection during firefighting	:	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus.
Other information	:	Do not allow run-off from fire-fighting to enter drains or water courses. Dispose of waste in accordance with environmental legislation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

For non-emergency personnel	:	Evacuate unnecessary personnel. Keep upwind. Provide adequate ventilation. Do not breathe dust. Avoid contact with skin, eyes and clothing. Wear recommended personal protective equipment. Concerning personal protective equipment to use, see section 8. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ensure equipment is adequately earthed. Use explosion-proof equipment. Use only non-sparking tools.

6.1.2. For emergency responders

For emergency responders	:	Ensure procedures and training for emergency decontamination and disposal are in place. Concerning personal protective equipment to use, see section 8.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Stop leak if safe to do so. Dam up the solid spill. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Large spills: scoop solid spill into closing containers. This material and its container must be disposed of in a safe way, and as per local legislation. Avoid dust formation. Do not flush with water.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide adequate ventilation. Do not breathe dust. Avoid contact with skin, eyes and clothing. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Take any precaution to avoid mixing with Incompatible materials, Refer to Section 10 on Incompatible Materials. Ensure proper process control to avoid excess waste discharge (temperature, concentration, pH, time). Avoid release to the environment. Avoid dust formation. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools.

Hygiene measures : Keep good industrial hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feedingstuffs. Remove contaminated clothes. Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool and well-ventilated place. Do not store near or with any of the incompatible materials listed in section 10. Bund storage facilities to prevent soil and water pollution in the event of spillage. Take precautionary measures against static discharge. Protect from moisture.

Heat and ignition sources : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Special rules on packaging : Containers which are opened should be properly resealed and kept upright to prevent leakage.

Packaging materials : Keep only in the original container.

7.3. Specific end use(s)

Coatings and paints. printing inks.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

copper (7440-50-8)		
Austria	MAK (OEL TWA)	1 mg/m³ (inhalable fraction) 0,1 mg/m³ (respirable fraction, smoke)
Austria	MAK (OEL STEL)	4 mg/m³ (inhalable fraction) 0,4 mg/m³ (respirable fraction, smoke)
Belgium	OEL TWA	0,2 mg/m³ (fume) 1 mg/m³ (dust and mist)

copper (7440-50-8)		
Bulgaria	OEL TWA	0,1 mg/m³ (metal vapor)
Croatia	GVI (OEL TWA) [1]	0,2 mg/m³ (fume) 1 mg/m³ (dust)
Croatia	KGVI (OEL STEL)	2 mg/m³ (dust)
Czech Republic	PEL (OEL TWA)	1 mg/m³ (dust) 0,1 mg/m³ (fume)
Denmark	OEL TWA [1]	1 mg/m³ (dust and powder) 0,1 mg/m³ (fume)
Estonia	OEL TWA	1 mg/m³ (total dust) 0,2 mg/m³ (respirable dust)
Finland	HTP (OEL TWA) [1]	0,02 mg/m³ (respirable dust)
France	VME (OEL TWA)	0,2 mg/m³ (fume) 1 mg/m³ (dust)
France	VLE (OEL C/STEL)	2 mg/m³ (dust)
Greece	OEL TWA	0,2 mg/m³ (fume) 1 mg/m³ (dust)
Greece	OEL STEL	2 mg/m³ (dust)
Hungary	AK (OEL TWA)	0,1 mg/m³ 0,01 mg/m³ (fume)
Hungary	CK (OEL STEL)	0,2 mg/m³
Ireland	OEL TWA [1]	0,2 mg/m³ (fume) 1 mg/m³ (dusts and mists)
Ireland	OEL STEL	2 mg/m³ (dusts and mists) 0,6 mg/m³ (calculated-fume)
Latvia	OEL TWA	0,5 mg/m³
Lithuania	IPRV (OEL TWA)	1 mg/m³ (inhalable fraction) 0,2 mg/m³ (respirable fraction)
Netherlands	TGG-8u (OEL TWA)	0,1 mg/m³ (inhalable dust)
Poland	NDS (OEL TWA)	0,2 mg/m³
Portugal	OEL TWA	0,2 mg/m³ (fume) 1 mg/m³ (dust and mist)
Romania	OEL TWA	0,5 mg/m³ (dust)
Romania	OEL STEL	0,2 mg/m³ (fume) 1,5 mg/m³ (dust)
Slovakia	NPHV (OEL TWA) [1]	1 mg/m³ (inhalable fraction) 0,2 mg/m³ (respirable fraction)
Spain	VLA-ED (OEL TWA) [1]	0,1 mg/m³ (see UNE EN 481:1995 on workplace atmospheres-respirable fraction)
Sweden	NGV (OEL TWA)	0,01 mg/m³ (respirable fraction)
United Kingdom	WEL TWA (OEL TWA) [1]	1 mg/m³ (dust and mists) 0,2 mg/m³ (fume)
United Kingdom	WEL STEL (OEL STEL)	0,6 mg/m³ (calculated-fume) 2 mg/m³ (dust and mist)

copper (7440-50-8)		
Norway	Grenseverdi (OEL TWA) [1]	0,1 mg/m³ (fume) 1 mg/m³ (dust)
Norway	Korttidsverdi (OEL STEL)	3 mg/m³ (value calculated-dust) 0,3 mg/m³ (value calculated-fume)
Switzerland	MAK (OEL TWA) [1]	0,1 mg/m³ (inhalable dust)
Switzerland	KZGW (OEL STEL)	0,2 mg/m³ (inhalable dust)
Australia	OES TWA [1]	1 mg/m³ (dust and mist) 0,2 mg/m³ (fume)
Canada (Quebec)	VEMP (OEL TWA)	0,2 mg/m³ (fume) 1 mg/m³ (dust and mist)
USA - ACGIH	ACGIH OEL TWA	0,2 mg/m³ (fume)
USA - IDLH	IDLH	100 mg/m³ (dust, fume and mist)
USA - NIOSH	NIOSH REL TWA	1 mg/m³ (dust and mist) 0,1 mg/m³ (fume)
USA - OSHA	OSHA PEL TWA [1]	0,1 mg/m³ (fume) 1 mg/m³ (dust and mist)
zinc powder— zinc dust (stabilised) (7440-66-6)		
Slovakia	NPHV (OEL TWA) [1]	0,1 mg/m³ (respirable fraction) 2 mg/m³ (inhalable fraction)

Additional information : Recommended monitoring procedures :. Personal air monitoring. Room air monitoring

8.2. Exposure controls

Engineering measure(s) : Provide adequate ventilation. Organisational measures to prevent /limit releases, dispersion and exposure. See Section 7 for information on safe handling. Apply measures to prevent dust explosions. Ensure equipment is adequately earthed.

Personal protective equipment : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hand protection : Wear chemically resistant gloves (tested to EN374) . Suitable material: Not determined. Breakthrough time : Not determined. Thickness : Not determined. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Eye protection : Use suitable eye protection (EN166): Safety glasses with side shields

Body protection : Wear suitable protective clothing

Respiratory protection : Not required for normal conditions of use. In case of insufficient ventilation, wear suitable respiratory equipment. Effective dust mask (EN 149). Half-face mask (DIN EN 140). full face mask (DIN EN 136). Filter type: P (EN 143)

Thermal hazard protection : Not required for normal conditions of use. Use dedicated equipment.

Environmental exposure controls : Avoid release to the environment. Comply with applicable Community environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance	:	Powder.
Colour	:	Gold.
Odour	:	odourless.
Odour threshold	:	No data available
pH	:	Not applicable
pH solution	:	Not available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting / freezing point	:	850 °C
Freezing point	:	No data available
Initial boiling point and boiling range	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Non flammable
Vapour pressure	:	No data available
Vapour density	:	No data available
Relative density	:	No data available
Density	:	8 – 8,9 g/cm³ (20 °C)
Solubility	:	Insoluble in water.
Partition coefficient n-octanol/water	:	No data available
Kinematic viscosity	:	Not applicable
Dynamic viscosity	:	Not applicable
Explosive properties	:	Not applicable. The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.
Oxidising properties	:	Not applicable. The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with oxidising properties.
Explosive limits	:	No data available
Particle size	:	Not available
Particle size distribution	:	Not available
Particle shape	:	Not available
Particle aspect ratio	:	Not available
Particle aggregation state	:	Not available
Particle agglomeration state	:	Not available
Particle specific surface area	:	Not available
Particle dustiness	:	Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal conditions. Reference to other sections: 10.4 & 10.5.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid the build-up of electrostatic charge. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid dust formation. Protect from moisture. See Section 7 for information on safe handling.

10.5. Incompatible materials

Oxidising agents. acids and bases. Halogens. Halogenated compounds. See Section 7 for information on safe handling.

10.6. Hazardous decomposition products

Reference to other sections 5.2.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity : Not classified (Based on available data, the classification criteria are not met)

copper (7440-50-8)	
LD50/oral/rat	300 – 500 mg/kg
LD50/dermal/rat	> 2000 mg/kg
LC50/inhalation/4h/rat	≥ 5,11 mg/l

zinc powder— zinc dust (stabilised) (7440-66-6)	
LD50/oral/rat	> 2000 mg/kg
LC50/inhalation/4h/rat	> 5,41 mg/l (OECD 403)

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: Not applicable

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: Not applicable

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

copper (7440-50-8)	
NOAEL, subchronic, oral, Rat	16.7 mg/kg bw/day

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

Gold Bronze Powders (Rich Pale Gold / Pale Gold / Ducate Gold) (zinc <25%)	
Kinematic viscosity	Not applicable

Other information : Symptoms related to the physical, chemical and toxicological characteristics. For further information see section 4.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

11.2.2 Other information

Other information : Symptoms related to the physical, chemical and toxicological characteristics,For further information see section 4

SECTION 12: Ecological information

12.1. Toxicity

Environmental properties : Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short–term (acute) : Very toxic to aquatic life.

Hazardous to the aquatic environment, long–term (chronic) : Toxic to aquatic life with long lasting effects.

copper (7440-50-8)	
LC50 - Fish [1]	190 – 210 µg/l
LC50 - Fish [2]	< 0,3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 - Crustacea [1]	0,03 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 72h - Algae [1]	0,0426 – 0,0535 mg/l (Species: Pseudokirchneriella subcapitata [static])
EC50 96h - Algae [1]	0,031 – 0,054 mg/l (Species: Pseudokirchneriella subcapitata [static])
NOEC chronic fish	11,4 µg/L

zinc powder— zinc dust (stabilised) (7440-66-6)	
LC50 - Fish [1]	2,16 – 3,05 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 - Fish [2]	0,211 – 0,269 mg/l (Exposure time: 96 h - Species: Pimephales promelas [semi-static])
EC50 - Crustacea [1]	0,139 – 0,908 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 - Other aquatic organisms [1]	(OECD 202) 0,937 mg/l Poecilia reticulata (Guppy) (OECD 202) 0,416 mg/l Ceriodaphnia Dubia (water flea)
EC50 72h - Algae [1]	0,09 – 0,125 mg/l (Species: Pseudokirchneriella subcapitata [static])
EC50 96h - Algae [1]	0,11 – 0,271 mg/l (Species: Pseudokirchneriella subcapitata [static])

ErC50 algae	EC50 72h algae [mg/l] (1) 0,09 - 0,125 mg/l (Species: Pseudokirchneriella subcapitata [static]) EC50 96h algae [mg/l] (1) 0,11 - 0,271 mg/l (Species: Pseudokirchneriella subcapitata [static])
LOEC (chronic)	240 µg/L Pimephales promelas (fathead minnow)
NOEC, aquatic invertebrates, long term, Ceriodaphnia Dubia (water flea)	25 µg/L (7 days, Freshwater)
NOEC, aquatic invertebrates, long term, Daphnia magna (Big water flea)	100 µg/L (3 weeks, Freshwater)
NOEC, aquatic invertebrates, long term, Mytilus edulis	75 µg/L (3 days, Freshwater)
NOEC, aquatic algae, Pseudokirchneriella subcapitata	24 µg/L (72 hours, OECD 201)
LOAEC, aquatic algae, Nitzschia closterium	20 µg/L (4 days)

12.2. Persistence and degradability

Gold Bronze Powders (Rich Pale Gold / Pale Gold / Ducate Gold) (zinc <25%)	
Persistence and degradability	No additional information available.

12.3. Bioaccumulative potential

Gold Bronze Powders (Rich Pale Gold / Pale Gold / Ducate Gold) (zinc <25%)	
Partition coefficient n-octanol/water	No data available
Bioaccumulative potential	No additional information available.

copper (7440-50-8)	
Partition coefficient n-octanol/water	Not applicable

12.4. Mobility in soil

Gold Bronze Powders (Rich Pale Gold / Pale Gold / Ducate Gold) (zinc <25%)	
Mobility in soil	No data available

12.5. Results of PBT and vPvB assessment

Gold Bronze Powders (Rich Pale Gold / Pale Gold / Ducate Gold) (zinc <25%)	
Results of PBT assessment	Not applicable

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

12.7. Other adverse effects

Other adverse effects : No data available

SECTION 13: Disposal considerations

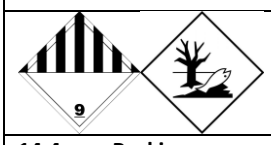
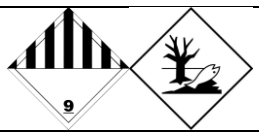
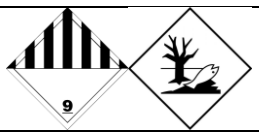
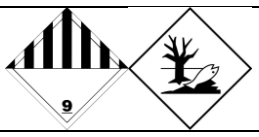
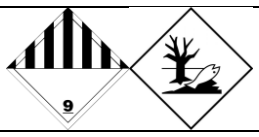
13.1. Waste treatment methods

Product/Packaging disposal recommendations : Avoid release to the environment. Dispose of empty containers and wastes safely. See Section 7 for information on safe handling. Refer to manufacturer/supplier for information on recovery/recycling. Recycling is preferred to disposal or incineration. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations. Handle contaminated packages in the same way as the substance itself. Dispose of contaminated materials in accordance with current regulations.

European waste catalogue (2001/573/EC, 75/442/EEC, 91/689/EEC) : This material and its container must be disposed of as hazardous waste
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities

SECTION 14: Transport information

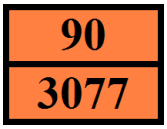
In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
3077	3077	3077	3077	3077
14.2. UN proper shipping name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper ; zinc powder— zinc dust (stabilised))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper ; zinc powder— zinc dust (stabilised))	Environmentally hazardous substance, solid, n.o.s. (copper ; zinc powder— zinc dust (stabilised))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper ; zinc powder— zinc dust (stabilised))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper ; zinc powder— zinc dust (stabilised))
Transport document description				
UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper ; zinc powder— zinc dust (stabilised)), 9, III, (-)	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper ; zinc powder— zinc dust (stabilised)), 9, III, MARINE POLLUTANT	UN 3077 Environmentally hazardous substance, solid, n.o.s. (copper ; zinc powder— zinc dust (stabilised)), 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper ; zinc powder— zinc dust (stabilised)), 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper ; zinc powder— zinc dust (stabilised)), 9, III
14.3. Transport hazard class(es)				
9	9	9	9	9
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information available				

14.6. Special precautions for user

Special precautions for user	:	No data available

- Overland transport

Classification code (ADR)	:	M7
Special provisions	:	274, 335, 375, 601
Limited quantities (ADR)	:	5kg
Excepted quantities (ADR)	:	E1
Packing instructions (ADR)	:	P002, IBC08, LP02, R001
Special packing provisions (ADR)	:	PP12, B3
Mixed packing provisions (ADR)	:	MP10
Portable tank and bulk container instructions (ADR)	:	T1, BK1, BK2, BK3
Portable tank and bulk container special provisions (ADR)	:	TP33
Tank code (ADR)	:	SGAV, LGBV
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	3
Special provisions for carriage - Packages (ADR)	:	V13
Special provisions for carriage - Bulk (ADR)	:	VC1, VC2
Special provisions for carriage - Loading, unloading and handling (ADR)	:	CV13
Hazard identification number (Kemler No.)	:	90
Orange plates	:	
Tunnel restriction code	:	-
EAC code	:	2Z

- Transport by sea

Special provisions (IMDG)	:	274, 335, 966, 967, 969
Limited quantities (IMDG)	:	5 kg
Excepted quantities (IMDG)	:	E1
Packing instructions (IMDG)	:	LP02, P002
Special packing provisions (IMDG)	:	PP12
IBC packing instructions (IMDG)	:	IBC08
IBC special provisions (IMDG)	:	B3
Tank instructions (IMDG)	:	BK1, BK2, BK3, T1
Tank special provisions (IMDG)	:	TP33
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-F
Stowage category (IMDG)	:	A
Stowage and handling (IMDG)	:	SW23

- Air transport

PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y956
PCA limited quantity max net quantity (IATA)	:	30kgG
PCA packing instructions (IATA)	:	956
PCA max net quantity (IATA)	:	400kg
CAO packing instructions (IATA)	:	956
CAO max net quantity (IATA)	:	400kg
Special provisions (IATA)	:	A97, A158, A179, A197, A215
ERG code (IATA)	:	9L

- Inland waterway transport

Classification code (ADN)	:	M7
Special provisions (ADN)	:	274, 335, 375, 601
Limited quantities (ADN)	:	5 kg
Excepted quantities (ADN)	:	E1
Carriage permitted (ADN)	:	T* B**
Equipment required (ADN)	:	PP, A***
Number of blue cones/lights (ADN)	:	0
Additional requirements/Remarks (ADN)	:	* Only in the molten state. ** For carriage in bulk see also 7.1.4.1. ** * Only in the case of transport in bulk.

- Rail transport

Classification code (RID)	:	M7
Special provisions (RID)	:	274, 335, 375, 601
Limited quantities (RID)	:	5kg
Excepted quantities (RID)	:	E1
Packing instructions (RID)	:	P002, IBC08, LP02, R001
Special packing provisions (RID)	:	PP12, B3
Mixed packing provisions (RID)	:	MP10
Portable tank and bulk container instructions (RID)	:	T1, BK1, BK2, BK3
Portable tank and bulk container special provisions (RID)	:	TP33
Tank codes for RID tanks (RID)	:	SGAV, LGBV
Transport category (RID)	:	3
Special provisions for carriage – Packages (RID)	:	W13
Special provisions for carriage – Bulk (RID)	:	VC1, VC2
Special provisions for carriage - Loading, unloading and handling (RID)	:	CW13, CW31
Colis express (express parcels) (RID)	:	CE11
Hazard identification number (RID)	:	90

14.7. Maritime transport in bulk according to IMO instruments

Code: IBC	:	No data available.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	copper

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

France

No ICPE	Installations classées Désignation de la rubrique	Code Régime	Rayon
4510.text	Dangereux pour l'environnement aquatique de catégorie aiguë 1 ou chronique 1.		
4510.1	La quantité totale susceptible d'être présente dans l'installation étant : 1. Supérieure ou égale à 100 t Quantité seuil bas au sens de l'article R. 511-10 : 100 t. Quantité seuil haut au sens de l'article R. 511-10 : 200 t.	A	1
4510.2	La quantité totale susceptible d'être présente dans l'installation étant : 2. Supérieure ou égale à 20 t mais inférieure à 100 t Quantité seuil bas au sens de l'article R. 511-10 : 100 t. Quantité seuil haut au sens de l'article R. 511-10 : 200 t.	DC	
4511.text	Dangereux pour l'environnement aquatique de catégorie chronique 2.		
4511.1	La quantité totale susceptible d'être présente dans l'installation étant : 1. Supérieure ou égale à 200 t Quantité seuil bas au sens de l'article R. 511-10 : 200 t. Quantité seuil haut au sens de l'article R. 511-10 : 500 t.	A	1
4511.2	La quantité totale susceptible d'être présente dans l'installation étant : 2. Supérieure ou égale à 100 t mais inférieure à 200 t Quantité seuil bas au sens de l'article R. 511-10 : 200 t. Quantité seuil haut au sens de l'article R. 511-10 : 500 t.	DC	

Germany

Regulatory reference : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1)

German storage class (LGK) : LGK 13 - Non-combustible solids

Hazardous Incident Ordinance (12. BImSchV) : Listed in the 12. BlmSchV (Annex I) under: 1.3.1

Quantity threshold for operational area under § 1 para. 1

- Sentence 1: 100000 kg
- Sentence 2: 200000 kg

Listed in the 12. BlmSchV (Annex I) under: 1.3.2

Quantity threshold for operational area under § 1 para. 1

- Sentence 1: 200000 kg
- Sentence 2: 500000 kg

Netherlands

Waterbezwaarlijkheid	:	A (1) - zeer vergiftig voor in water levende organismen kan in aquatische milieu op lange termijn schadelijke effecten veroorzaken
SZW-lijst van kankerverwekkende stoffen	:	None of the components are listed
SZW-lijst van mutagene stoffen	:	None of the components are listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	:	None of the components are listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid	:	None of the components are listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling	:	None of the components are listed

15.2. Chemical safety assessment

Not applicable

For the following substances of this mixture a chemical safety assessment has been carried out
copper

SECTION 16: Other information

Abbreviations and acronyms:

	ABM = Algemene beoordelingsmethodiek
	ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods Code LEL = Lower Explosive Limit/Lower Explosion Limit UEL = Upper Explosion Limit/Upper Explosive Limit REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
	BTT = Breakthrough time (maximum wearing time)
	DMEL = Derived Minimal Effect level
	DNEL = Derived No Effect Level
	EC50 = Median Effective Concentration
	EL50 = Median effective level
	ErC50 = EC50 in terms of reduction of growth rate
	ErL50 = EL50 in terms of reduction of growth rate
	EWC = European waste catalogue
	LC50 = Median lethal concentration
	LD50 = Median lethal dose

	LL50 = Median lethal level
	NA = Not applicable
	NOEC = No observed effect concentration
	NOEL: no-observed-effect level
	NOELR = No observed effect loading rate
	NOAEC = No observed adverse effect concentration
	NOAEL = No observed adverse effect level
	N.O.S. = Not Otherwise Specified
	OEL = Occupational Exposure Limits - Short Term Exposure Limits (STELs)
	PNEC = Predicted No Effect Concentration
	Quantitative structure-activity relationship (QSAR)
	STOT = Specific Target Organ Toxicity
	TWA = time weighted average
	VOC = Volatile organic compounds
	WGK = Wassergefährdungsklasse (Water Hazard Class under German Federal Water Management Act)

Sources of key data used to compile the datasheet : ECHA (European Chemicals Agency). LOLI. Supplier information.

Training advice : Training staff on good practice. Manipulations are to be done only by qualified and authorised persons.

Other information : Classification - Assessment method: CLP Calculation method (Article 9).

Full text of H- and EUH-statements:

Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
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.

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Labelling according to Regulation (EC) No. 1272/2008 [CLP]