

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



STANDART* Bronze Powder Ink Lining 8100 Rich Gold

Version 1.1

Revision Date 21.01.2014

Print Date 19.02.2014

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

1.1 Product identifier

Trade name : STANDART* Bronze Powder Ink Lining 8100 Rich Gold

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

This information is not available.

1.3 Details of the supplier of the safety data sheet

Company : Eckart GmbH
Guentersthal 4
91235 Hartenstein
Telephone : +499152770
Telefax : +499152777008
E-mail address : msds.eckart@altana.com
Responsible/issuing person

1.4 Emergency telephone number

GBK Gefahrgut Büro GmbH, Ingelheim, Germany:
From outside US: : (001) 352-323-3500
(First call in English, response in your language is possible)
US & Canada (toll free) : 1-800-5355-053

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity , Category 4	H302: Harmful if swallowed.
Acute aquatic toxicity , Category 1	H400: Very toxic to aquatic life.
Chronic aquatic toxicity , Category 1	H410: Very toxic to aquatic life with long lasting effects.
Flammable solids , Category 1	H228: Flammable solid.

Classification (67/548/EEC, 1999/45/EC)

Harmful	R22: Harmful if swallowed.
Dangerous for the environment	R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Highly flammable	R11: Highly flammable.

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2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



Signal word

: Danger

Hazard statements

:	H302 H228 H410	Harmful if swallowed. Flammable solid. Very toxic to aquatic life with long lasting effects.
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Precautionary statements

:	Prevention: P270 P273 P210 P240 P241 P261 Response: P391 P370 + P378 P370 + P378 P312 Disposal: P501	Do not eat, drink or smoke when using this product. Avoid release to the environment. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Avoid breathing dust. Collect spillage. In case of fire: Use for extinction: Special powder for metal fires. In case of fire: Use for extinction: Dry sand. Call a POISON CENTER or doctor/ physician if you feel unwell. Dispose of contents/ container to an approved waste disposal plant.
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Hazardous components which must be listed on the label:
7440-50-8 copper

2.3 Other hazards

No information available.

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SECTION 3: Composition/information on ingredients
3.2 Mixtures
Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
copper	7440-50-8 231-159-6	Xn-N; R22- R50/53	Acute Tox. 4; H302 Aquatic Acute 1; H400 Aquatic Chronic 2; H411	>= 50 - <= 100
zinc	7440-66-6 231-175-3 01-2119467174-37	N; R50-R53	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 25 - < 50

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures
4.1 Description of first aid measures

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
- Move the victim to fresh air.
- Do not leave the victim unattended.
- If inhaled : If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : If on skin, rinse well with water.
If on clothes, remove clothes.
- Wash off immediately with soap and plenty of water.
- In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Keep eye wide open while rinsing.

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If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

Risks : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Special powder against metal fire, Dry sand, ABC powder

Unsuitable extinguishing media : Water, High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self contained breathing apparatus for fire fighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Use a water spray to cool fully closed containers.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the

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surrounding environment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Avoid dust formation.
Avoid breathing dust.
Remove all sources of ignition.
Use personal protective equipment.
Evacuate personnel to safe areas.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform
respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Keep in suitable, closed containers for disposal.

Use mechanical handling equipment.

Pick up and transfer to properly labelled containers.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of respirable particles. Do not breathe
vapours/dust. For personal protection see section 8. Smoking,
eating and drinking should be prohibited in the application
area. Dispose of rinse water in accordance with local and
national regulations.

Avoid creating dust. Routine housekeeping should be
instituted to ensure that dusts do not accumulate on surfaces.

Advice on protection against fire and explosion : Keep away from open flames, hot surfaces and sources of
ignition.

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Normal measures for preventive fire protection.

Hygiene measures : When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

General industrial hygiene practice. Do not smoke. Wash hands before breaks and at the end of workday. Keep away from food and drink. Keep away from tobacco products.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : No smoking. Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.

Electrical installations / working materials must comply with the technological safety standards.

Keep away from sources of ignition - No smoking. Do not store near combustible materials. Keep containers tightly closed in a cool, well-ventilated place. To maintain product quality, do not store in heat or direct sunlight.

Further information on storage conditions : Protect from humidity and water.

Advice on common storage : Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Do not store together with oxidizing and self-igniting products.

Other data : Keep in a dry place. No decomposition if stored and applied as directed.

Dampness : Keep in a dry, cool and well-ventilated place.

7.3 Specific end use(s)

This information is not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value type (Form of	Control parameters	Update	Basis

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		exposure)			
copper	7440-50-8	TWA (Inhalable)	10 mg/m ³	2011-12-01	GB EH40
Further information		The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m ⁻³ 8-hour TWA of inhalable dust or 4 mg.m ⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used			
copper	7440-50-8	TWA (Respirable)	4 mg/m ³	2011-12-01	GB EH40
Further information		The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m ⁻³ 8-hour TWA of inhalable dust or 4 mg.m ⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used			
copper	7440-50-8	TWA	1 mg/m ³	2005-04-06	GB EH40
copper	7440-50-8	STEL	2 mg/m ³	2005-04-06	GB EH40
copper	7440-50-8	TWA	0.2 mg/m ³	2005-04-06	GB EH40
Further information		The word 'fume' is often used to include gases and vapours. This is not the case for exposure limits where 'fume' should normally be applied to solid particles generated by chemical reactions or condensed from the gaseous state, usually after volatilisation from melted substances. The generation of fume is often accompanied by a chemical reaction such as oxidation or thermal breakdown. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used			
Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
zinc	7440-66-6	TWA (Inhalable)	10 mg/m ³	2011-12-01	GB EH40
Further information		The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m ⁻³ 8-hour TWA of inhalable dust or 4 mg.m ⁻³ 8-hour TWA of respirable dust. This means that any			

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		dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used			
zinc	7440-66-6	TWA (Respirable)	4 mg/m ³	2011-12-01	GB EH40
Further information		The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m ⁻³ 8-hour TWA of inhalable dust or 4 mg.m ⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used			

DNEL:

copper (7440-50-8)

End Use: Workers
 Exposure routes: Skin contact
 Potential health effects: short term – systemic effects
 Value: 273 mg/kg

DNEL:

copper (7440-50-8)

End Use: Workers
 Exposure routes: Inhalation
 Potential health effects: short term – systemic effects
 Value: 20 mg/m³

DNEL:

copper (7440-50-8)

End Use: Workers
 Exposure routes: Skin contact
 Potential health effects: long term – systemic effects
 Value: 137 mg/kg

DNEL:

copper (7440-50-8)

End Use: Consumers
 Exposure routes: Skin contact
 Potential health effects: short term – systemic effects
 Value: 273 mg/kg

DNEL:

copper (7440-50-8)

End Use: Consumers
 Exposure routes: Inhalation
 Potential health effects: short term – systemic effects
 Value: 20 mg/m³

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DNEL:

zinc (7440-66-6)

End Use: Workers
 Exposure routes: Inhalation
 Potential health effects: long term – systemic effects
 Value: 5 mg/m³

DNEL:

zinc (7440-66-6)

End Use: Workers
 Exposure routes: Skin contact
 Potential health effects: long term – systemic effects
 Value: 83 mg/kg

DNEL:

zinc (7440-66-6)

End Use: Consumers
 Exposure routes: Ingestion
 Potential health effects: long term – systemic effects
 Value: 0.83 mg/kg

DNEL:

zinc (7440-66-6)

End Use: Consumers
 Exposure routes: Skin contact
 Potential health effects: long term – systemic effects
 Value: 83 mg/kg

DNEL:

zinc (7440-66-6)

End Use: Consumers
 Exposure routes: Inhalation
 Potential health effects: long term – systemic effects
 Value: 2.5 mg/m³

PNEC:

copper (7440-50-8)

:
 Soil
 Value: 65.5 mg/kg

PNEC:

copper (7440-50-8)

:
 Fresh water
 Value: 0.0078 mg/l

PNEC:

copper (7440-50-8)

:
 Fresh water sediment
 Value: 87 mg/kg

PNEC:

copper (7440-50-8)

:
 Marine water
 Value: 0.0052 mg/l

PNEC:

copper (7440-50-8)

:
 Marine sediment

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	:	Value: 676 mg/kg
PNEC: copper (7440-50-8)	:	STP Value: 0.230 mg/l
PNEC: zinc (7440-66-6)	:	Fresh water Value: 0.0206 mg/l
PNEC: zinc (7440-66-6)	:	Fresh water sediment Value: 117.8 mg/kg
PNEC: zinc (7440-66-6)	:	Marine water Value: 0.0061 mg/l
PNEC: zinc (7440-66-6)	:	STP Value: 0.052 mg/l
PNEC: zinc (7440-66-6)	:	Soil Value: 35.6 mg/kg
PNEC: zinc (7440-66-6)	:	Marine sediment Value: 56.5 mg/kg

8.2 Exposure controls

Personal protective equipment

Eye protection : Eye wash bottle with pure water

: Safety glasses

Hand protection

Material : Leather

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

: Leather gloves

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The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.

The exact break through time can be obtained from the protective glove producer and this has to be observed.

Recommended preventive skin protection

- Skin and body protection : Dust impervious protective suit
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- : Anti-static and fire resistant protective clothing. EN 531; EN 533; EN 1149-1. Anti-static safety shoes.
Recommended preventive skin protection
- Respiratory protection : Use suitable breathing protection if workplace concentration requires.
Respirator with a dust filter
P1 filter

Environmental exposure controls

- General advice : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

- Water :
- : The product should not be allowed to enter drains, water courses or the soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance : powder
- Colour : gold

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Odour	: odourless
pH	: no data available
Freezing point	: no data available
Boiling point/boiling range	: no data available
Flash point	: no data available
Bulk density	: no data available
Flammability (solid, gas)	: no data available
Auto-flammability	: no data available
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: no data available
Density	: no data available
Water solubility	: no data available
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition	: no data available
Viscosity, dynamic	: no data available
Viscosity, kinematic	: no data available
Flow time	: no data available

9.2 Other information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

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Hazardous reactions : No decomposition if stored and applied as directed.
Stable under recommended storage conditions., No hazards to be specially mentioned.
Dust may form explosive mixture in air.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.
no data available

10.5 Incompatible materials

Materials to avoid : no data available

10.6 Hazardous decomposition products

Hazardous decomposition products : no data available
Other information : no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product

Acute oral toxicity : Acute toxicity estimate : 720.88 mg/kg
Method: Calculation method

Components:

7440-66-6 :

Acute oral toxicity : rat: > 2,000 mg/kg
Acute inhalation toxicity : LC50 rat: 5.41 mg/l

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Exposure time: 4 h

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Carcinogenicity

no data available

Toxicity to reproduction/fertility

no data available

Reprod.Tox./Development/Teratogenicity

no data available

STOT - single exposure

no data available

STOT - repeated exposure

no data available

Aspiration toxicity

no data available

Further information

Product

no data available

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SECTION 12: Ecological information

12.1 Toxicity

Components:

copper (7440-50-8) :

M-Factor : 10

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

no data available

12.6 Other adverse effects

Product:

Additional ecological
information

: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

European Waste Catalogue : 12 01 04 - non-ferrous metal dust and particles

13.1 Waste treatment methods

Product

: The product should not be allowed to enter drains, water courses or the soil.

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Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

14.1 UN number

ADR : 3089
IMDG : 3089
IATA : 3089

14.2 Proper shipping name

ADR : METAL POWDER, FLAMMABLE, N.O.S.
(Gold bronze powder, Copper metal powder)
IMDG : METAL POWDER, FLAMMABLE, N.O.S.
(Gold bronze powder, Copper metal powder)
IATA : METAL POWDER, FLAMMABLE, N.O.S.
(Gold bronze powder)

14.3 Transport hazard class

ADR : 4.1
IMDG : 4.1
IATA : 4.1

14.4 Packing group

ADR
Packaging group : II
Classification Code : F3
Hazard identification No : 40
Labels : 4.1
Tunnel restriction code : (E)

IMDG

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Packaging group : II
Labels : 4.1
EmS Number : F-G, S-G

IATA

Packing instruction (cargo aircraft) : 448
Packing instruction (passenger aircraft) : 445
Packing instruction (LQ) : Y441
Packaging group : II
Labels : 4.1

14.5 Environmental hazards

ADR : Environmentally hazardous
IMDG : Marine pollutant

14.6 Special precautions for user

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

no data available

SECTION 15: Regulatory information

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

Water contaminating class : nwg not water endangering
(Germany)

15.2 Chemical Safety Assessment

no data available

SECTION 16: Other information

Full text of R-Phrases

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R22	Harmful if swallowed.
R50	Very toxic to aquatic organisms.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of H-Statements

H302	Harmful if swallowed.
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.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.