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|  <p>GOLD LEAF AND METALLIC POWDERS</p> <p>In The Family Of  NEUBERG<br/>SINEUBERG<br/>PORTERS GROUP INC.</p> | <b>SAFETY DATA SHEET</b> | Page : 1 / 11           |
|  | <b>Bronze Powder</b>     | Revision nr : 3         |
|  |                          | Issue date : 09/03/2015 |
|  |                          | Supersedes : 25/06/2013 |
|  |                          |                         |

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

### 1.1. Product identifier

Trade name/designation : Bronze Powder  
Product code : 2500 - 2500/2 - 36 - 3000 - 3900 - 4000 - 5000 - 6000 (Basic Colour: Rich Gold, Pale Gold, Rich Pale Gold & Deep Gold)

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

Main use category : Industrial uses, Professional use

### 1.3. Details of the supplier of the safety data sheet

Company : Distributed by:  
Gold Leaf and Metallic Powders  
  
6001 Santa Monica Boulevard  
Los Angeles, CA 90038 USA  
Telephone (800) 569-5323  
E-mail: info@glandmp.com  
Website: www.GLandMP.com

### 1.4. Emergency telephone number

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

IRELAND (REPUBLIC OF)  
National Poisons Information Centre  
Beaumont Hospital +353 18 37 99 64/+353 1 809 21 66  
UNITED KINGDOM  
National Poisons Information Service  
(Newcastle Centre) 0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)  
Regional Drugs and Therapeutics Centre,  
Wolfson Unit

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### 2.1.1. Classification according to Regulation (EU) 1272/2008

CLP-Classification : The product is classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

Aquatic Acute 1 H400

Aquatic Chronic 1 H410

Full text of H-phrases: see section 16


#### 2.1.2. Classification according to EU Directives 67/548/EEC or 1999/45/EC

Classification : This mixture is classified as hazardous according to 1999/45/EC.  
N; R50/53

Full text of R-phrases: see section 16

### 2.2. Label elements

#### 2.2.1. Labelling according to Regulation (EU) 1272/2008

|  |                            |                         |
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Hazard pictograms :



GHS09

Signal word :

Warning

Hazard statements :

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements :

P273 - Avoid release to the environment.

P391 - Collect spillage.

P501 - Dispose of contents/ container to an approved waste disposal plant.

### 2.2.2. Labelling according to Directives (67/548 - 1999/45)

Not relevant

### 2.3. Other hazards

Other hazards :

PBT/vPvB data

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Substance name                       | Product identifier  | %       | Classification according to Directive 67/548/EEC |
|--------------------------------------|---|---------|--|
| copper                               | (CAS No.) 7440-50-8<br>(EC No) 231-159-6<br>(REACH-no) 01-2119480154-42-XXXX                            | 70 - 90 | N; R50<br>R53                                    |
| Zinc powder - zinc dust (stabilized) | (CAS No.) 7440-66-6<br>(EC No) 231-175-3<br>(EC Index) 030-002-00-7<br>(REACH-no) 01-2119467174-37-XXXX | 10 - 30 | N; R50/53  |

| Substance name                       | Product identifier  | %       | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--------------------------------------|---|---------|---|
| copper                               | (CAS No.) 7440-50-8<br>(EC No) 231-159-6<br>(REACH-no) 01-2119480154-42-XXXX                            | 70 - 90 | Aquatic Acute 1, H400 (M=10)<br>Aquatic Chronic 3, H412         |
| Zinc powder - zinc dust (stabilized) | (CAS No.) 7440-66-6<br>(EC No) 231-175-3<br>(EC Index) 030-002-00-7<br>(REACH-no) 01-2119467174-37-XXXX | 10 - 30 | Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410                |

Full text of R- and H-phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

Inhalation :

Provide fresh air.

When in doubt or if symptoms are observed, get medical advice.

Skin contact :

No hazards which require special first aid measures.



Eye contact :

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

If symptoms persist, call a physician.

In case of ingestion :

When in doubt or if symptoms are observed, get medical advice.

|   |                          |                         |
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Additional advice : Treat symptomatically.  
See also section 8  
First aider: Pay attention to self-protection!  
When in doubt or if symptoms are observed, get medical advice.

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

Inhalation : Repeated or prolonged exposure: (dust) : May cause respiratory impairment and lung damage.

Skin contact : No adverse effects are expected.

Eye contact : Dust contact with the eyes can lead to mechanical irritation.

Ingestion : May be irritating.

Other adverse effects : none.

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

No data available

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

Suitable extinguishing media : Foam, ABC-powder, Carbon dioxide, Dry sand

Extinguishing media which must not be used : Water  
for safety reasons:

**5.2. Special hazards arising from the substance or mixture**

Fire hazard : Non-flammable.

Specific hazards : Hazardous decomposition products  
metal oxides  
Do not allow run-off from fire-fighting to enter drains or water courses.  
Dispose according to legislation.

**5.3. Advice for firefighters**

Advice for firefighters : Special protective equipment for firefighters.  
In case of fire: Wear self-contained breathing apparatus.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel : Evacuate area.  
Prevent unauthorised persons entering the zone.  
Provide adequate ventilation.  
Use personal protective equipment as required.  
Personal protection equipment: see section 8  
Avoid generation of dust.



For emergency responders : Ensure procedures and training for emergency decontamination and disposal are in place.  
Personal protection equipment: see section 8.

**6.2. Environmental precautions**

Environmental precautions : Do not allow to enter into surface water or drains.

**6.3. Methods and material for containment and cleaning up**

Methods for cleaning up : Stop leak if safe to do so.  
Dam up.  
Take up mechanically.  
Do not rinse down with water. /  
Water (with cleaning agent)  
Dispose according to legislation.

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#### 6.4. Reference to other sections

Personal protection equipment: see section 8

Disposal: see section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Handling : Provide adequate ventilation.  
 Use personal protective equipment as required.  
 Avoid contact with skin, eyes and clothes.  
 Personal protection equipment: see section 8  
 Avoid generation of dust.  
 Take any precaution to avoid mixing with incompatible materials.  
 See also section 10  
 Do not allow to enter into surface water or drains.
- Advices on general occupational hygiene : Keep good industrial hygiene.  
 When using do not eat, drink or smoke.  
 Wash hands before breaks and immediately after using the product.  
 Take off contaminated clothing.

#### 7.2. Conditions for safe storage, including any incompatibilities

- Storage : Keep containers tightly closed in a dry, cool and well-ventilated place.  
 Do not store near or with any of the incompatible materials listed in section 10.  
 Protect against water. / Humidity
- Packaging materials : Keep/Store only in original container.

#### 7.3. Specific end use(s)


No data available.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Exposure limit values :


| copper (7440-50-8)              |  |  |
|---------------------------------|--|--|
| Austria                         | MAK (mg/m <sup>3</sup> )   | 1 mg/m <sup>3</sup> (inhalable fraction)<br>0,1 mg/m <sup>3</sup> (respirable fraction, smoke) |
| Austria                         | MAK Short time value (mg/m <sup>3</sup> )                                | 4 mg/m <sup>3</sup> (inhalable fraction)<br>0,4 mg/m <sup>3</sup> (respirable fraction, smoke) |
| Belgium                         | Limit value (mg/m <sup>3</sup> )   | 0,2 mg/m <sup>3</sup> (fume)<br>1 mg/m <sup>3</sup> (dust and mist)                            |
| Bulgaria                        | OEL TWA (mg/m <sup>3</sup> )   | 0,1 mg/m <sup>3</sup> (metal vapor)  |
| Croatia                         | GVI (granična vrijednost izloženosti) (mg/m <sup>3</sup> )               | 0,2 mg/m <sup>3</sup> (fume)<br>1 mg/m <sup>3</sup> (dust)                                     |
| Croatia                         | KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m <sup>3</sup> ) | 2 mg/m <sup>3</sup> (dust and fumes)   |
| France                          | VLE (mg/m <sup>3</sup> )   | 2 mg/m <sup>3</sup> (dust)   |
| France                          | VME (mg/m <sup>3</sup> )   | 0,2 mg/m <sup>3</sup> (fume)<br>1 mg/m <sup>3</sup> (dust)                                     |
| Greece                          | OEL TWA (mg/m <sup>3</sup> )   | 0,2 mg/m <sup>3</sup> (fume)<br>1 mg/m <sup>3</sup> (dust)                                     |
| Greece                          | OEL STEL (mg/m <sup>3</sup> )  | 2 mg/m <sup>3</sup> (dust)   |
| Italy - Portugal - USA<br>ACGIH | ACGIH TWA (mg/m <sup>3</sup> )   | 0,2 mg/m <sup>3</sup> (fume)   |

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| <b>copper (7440-50-8)</b> |  |   |
|---------------------------|--|---|
| Latvia                    | OEL TWA (mg/m <sup>3</sup> )                             | 0,5 mg/m <sup>3</sup>   |
| Spain                     | VLA-ED (mg/m <sup>3</sup> )                              | 0,2 mg/m <sup>3</sup> (fume)<br>1 mg/m <sup>3</sup> (dust and mist)                     |
| Switzerland               | VLE (mg/m <sup>3</sup> )                                 | 0,2 mg/m <sup>3</sup> (inhalable)   |
| Switzerland               | VME (mg/m <sup>3</sup> )                                 | 0,1 mg/m <sup>3</sup> (inhalable)   |
| Netherlands               | Grenswaarde TGG 8H (mg/m <sup>3</sup> )                  | 0,1 mg/m <sup>3</sup> (inhalable fraction)  |
| United Kingdom            | WEL TWA (mg/m <sup>3</sup> )                             | 1 mg/m <sup>3</sup> (dust and mists)<br>0,2 mg/m <sup>3</sup> (fume)                    |
| United Kingdom            | WEL STEL (mg/m <sup>3</sup> )                            | 0,6 mg/m <sup>3</sup> (calculated-fume)<br>2 mg/m <sup>3</sup> (dust and mist)          |
| Czech Republic            | Expoziční limity (PEL) (mg/m <sup>3</sup> )              | 1 mg/m <sup>3</sup> (dust)<br>0,1 mg/m <sup>3</sup> (fume)                              |
| Denmark                   | Grænseværdie (langvarig) (mg/m <sup>3</sup> )            | 1,0 mg/m <sup>3</sup> (dust and powder)<br>0,1 mg/m <sup>3</sup> (fume)                 |
| Finland                   | HTP-arvo (8h) (mg/m <sup>3</sup> )                       | 1 mg/m <sup>3</sup><br>0,1 mg/m <sup>3</sup> (respirable dust and fume)                 |
| Hungary                   | AK-érték   | 1 mg/m <sup>3</sup><br>0,1 mg/m <sup>3</sup> (fume)                                     |
| Hungary                   | CK-érték   | 4 mg/m <sup>3</sup><br>0,4 mg/m <sup>3</sup> (fume)                                     |
| Ireland                   | OEL (8 hours ref) (mg/m <sup>3</sup> )                   | 0,2 mg/m <sup>3</sup> (fume)<br>1 mg/m <sup>3</sup> (dust and mist)                     |
| Ireland                   | OEL (15 min ref) (mg/m <sup>3</sup> )                    | 0,6 mg/m <sup>3</sup> (calculated-fume)<br>2 mg/m <sup>3</sup> (dust and mist)          |
| Lithuania                 | IPRV (mg/m <sup>3</sup> )                                | 1 mg/m <sup>3</sup> (inhalable fraction)<br>0,2 mg/m <sup>3</sup> (respirable fraction) |
| Norway                    | Gjennomsnittsverdier (AN) (mg/m <sup>3</sup> )           | 0,1 mg/m <sup>3</sup> (fume)<br>1 mg/m <sup>3</sup> (dust)                              |
| Norway                    | Gjennomsnittsverdier (Kortidsverdi) (mg/m <sup>3</sup> ) | 0,3 mg/m <sup>3</sup> (fume)<br>3 mg/m <sup>3</sup> (dust)                              |
| Poland                    | NDS (mg/m <sup>3</sup> )                                 | 0,2 mg/m <sup>3</sup>   |
| Romania                   | OEL TWA (mg/m <sup>3</sup> )                             | 0,50 mg/m <sup>3</sup> (powder)   |
| Romania                   | OEL STEL (mg/m <sup>3</sup> )                            | 0,20 mg/m <sup>3</sup> (fume)<br>1,50 mg/m <sup>3</sup> (dust)                          |
| Slovakia                  | NPHV (priemerná) (mg/m <sup>3</sup> )                    | 1 mg/m <sup>3</sup> (dust)<br>0,1 mg/m <sup>3</sup> (fume)                              |
| Slovakia                  | NPHV (Hraničná) (mg/m <sup>3</sup> )                     | 2 mg/m <sup>3</sup> (dust)<br>0,2 mg/m <sup>3</sup> (fume)                              |
| Sweden                    | nivågränsvärde (NVG) (mg/m <sup>3</sup> )                | 1 mg/m <sup>3</sup> (total dust)<br>0,2 mg/m <sup>3</sup> (respirable dust)             |

| <b>Zinc powder - zinc dust (stabilized) (7440-66-6)</b> |                          |   |
|---|--------------------------|---|
| Switzerland   | VLE (mg/m <sup>3</sup> ) | 0,4 mg/m <sup>3</sup> (respirable)                                    |
| Switzerland   | VME (mg/m <sup>3</sup> ) | 0,1 mg/m <sup>3</sup> (respirable)<br>2 mg/m <sup>3</sup> (inhalable) |

Recommended monitoring procedures : Concentration measurement in air  
Personal air monitoring

|  |                          |                         |
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## **8.2. Exposure controls**

|                                 |   |   |
|---------------------------------|---|---|
| Personal protection equipment   | : | The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. :   |
| Respiratory protection          | : | dust<br>Use appropriate respiratory protection.<br>Effective dust mask. (EN 149)<br>Respirator with a particle filter (EN 143) :<br>Full face mask (EN 136)<br>Half-face mask (DIN EN 140)<br>Filter type: P1   |
| Hand protection                 | : | Wear gloves in accordance with EN 388 as a protection against mechanical risks., The selection of specific gloves for a specific application and time of use in a working area, should also take into account other factors on the working space, such as (but not limited to): other chemicals that are possibly used, physical requirements (protection against cutting/drilling, skill, thermal protection), and the instructions/specification of the supplier of gloves. |
| Eye protection                  | : | Wear eye glasses with side protection according to EN 166.  |
| Body protection                 | : | No special protective equipment required.   |
| Thermal hazard protection       | : | Use dedicated equipment.<br>Not required under normal use.  |
| Engineering control measures    | : | Use only in area provided with appropriate exhaust ventilation.<br>Organisational measures to prevent/limit releases, dispersion and exposure<br>See also section 7   |
| Environmental exposure controls | : | Do not allow to enter into surface water or drains.<br>Comply with applicable Community environmental protection legislation.   |

## **SECTION 9: Physical and chemical properties**

### **9.1. Information on basic physical and chemical properties**

|  |   |                                       |
|--|---|---------------------------------------|
| Appearance                                   | : | Powder                                |
| Colour                                       | : | gold                                  |
| Odour  | : | odourless                             |
| Odour threshold:                             | : | No data available                     |
| Odour threshold:                             | : | No data available                     |
| pH   | : | Not applicable                        |
| Melting point/freezing point                 | : | 850 °C                                |
| Initial boiling point and boiling range      | : | No data available                     |
| Flash point                                  | : | Not applicable                        |
| Evaporation rate                             | : | No data available                     |
| Flammability (solid, gas)                    | : | Non-flammable.                        |
| Upper/lower flammability or explosive limits | : | No data available                     |
| Vapour pressure                              | : | No data available                     |
| Vapour density                               | : | No data available                     |
| Density                                      | : | 7,14 - 8,96 g/cm <sup>3</sup> @ 20 °C |
| Relative density                             | : | No data available                     |
| Water solubility                             | : | Insoluble                             |
| Solubility in different media                | : | No data available                     |
| Partition coefficient n-octanol/water        | : | Not applicable                        |

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Auto-ignition temperature : Not applicable

Decomposition temperature : No data available

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.

### **9.2. Other information**

Other information : (Apparent) Density : 0.6 - 1.4 g/cm<sup>3</sup> @ 20 °C

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

Reactivity : None under normal processing.  
Reference to other sections: 10.5

### **10.2. Chemical stability**

Stability : The product is stable under storage at normal ambient temperatures.

### **10.3. Possibility of hazardous reactions**

Possibility of hazardous reactions : Reference to other sections: 10.4

### **10.4. Conditions to avoid**

Conditions to avoid : Remove all sources of ignition.  
See also section 7

### **10.5. Incompatible materials**

Incompatible materials : Acids and bases ., Oxidising substances ., Halogens ., Halogenated compounds .

### **10.6. Hazardous decomposition products**

Hazardous decomposition products : metal oxides

## **SECTION 11: Toxicological information**

### **11.1. Information on toxicological effects**

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



| <b>Zinc powder - zinc dust (stabilized) (7440-66-6)</b> |                          |
|---|--------------------------|
| LD50/oral/rat   | > 2000 mg/kg             |
| LC50/inhalation/4h/rat                                  | > 5410 mg/m <sup>3</sup> |

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

Serious eye damage/eye 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.)

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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.)

|   |                            |
|---|----------------------------|
| <b>Zinc powder - zinc dust (stabilized) (7440-66-6)</b> |                            |
| NOEL (oral, rat, 90 days)                               | 31,52 mg/kg bodyweight/day |

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

#### Other information

Symptoms related to the physical, chemical and toxicological characteristics, Reference to other sections: 4.2

## SECTION 12: Ecological information

### 12.1. Toxicity

Toxicity : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

|                           |   |
|---------------------------|---|
| <b>copper (7440-50-8)</b> |   |
| LC50 fish 1               | 0,0068 - 0,0156 mg/l (Exposure time: 96 h - Species: Pimephales promelas) |
| EC50 Daphnia 1            | 0,03 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])         |
| LC50 fish 2               | < 0,3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])  |
| EC50 72h algae [mg/l] (1) | 0,0426 - 0,0535 mg/l (Species: Pseudokirchneriella subcapitata [static])  |
| EC50 96h algae [mg/l] (1) | 0,031 - 0,054 mg/l (Species: Pseudokirchneriella subcapitata [static])    |

|   |   |
|---|---|
| <b>Zinc powder - zinc dust (stabilized) (7440-66-6)</b> |   |
| LC50 fish 1   | 439 µg/l  |
| EC50 Daphnia 1  | 1833 - 2909 µg/l  |
| 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])   |
| NOEC chronic fish                                       | 30 d 169 µg/L   |
| NOEC chronic crustacea                                  | 25 - 50 µg/L  |
| Additional information                                  | EC10, algae: 2.5 - 48 µg/L<br>NOEC, Chronic Toxicity to aquatic plants: 60 µg/L<br>EC50, microorganisms: 5.2 mg/l<br>NOEC, aquatic organisms: 10 - 15 µg/L<br>LOEC, aquatic organisms: 10 - 15 µg/L |

### 12.2. Persistence and degradability


Persistence and degradability : Not applicable

### 12.3. Bioaccumulative potential

Bioaccumulation : No data available

Partition coefficient n-octanol/water : Not applicable



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#### **12.4. Mobility in soil**

Mobility : No data available

#### **12.5. Results of PBT and vPvB assessment**

PBT/vPvB data : PBT/vPvB data :  
Not applicable

#### **12.6. Other adverse effects**

Other information :

### **SECTION 13: Disposal considerations**

#### **13.1. Waste treatment methods**

Product waste: : Do not dispose of together with household waste.  
If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging : Delivery to an approved waste disposal company.

Further ecological information : Do not allow to enter into surface water or drains.

List of proposed waste codes/waste designations in accordance with EWC : Classified as hazardous waste according to European Union regulations.  
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

### **SECTION 14: Transport information**

#### **14.1. UN number**

UN number : 3077

#### **14.2. UN proper shipping name**

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Copper () Zinc ())

Proper shipping name IATA/IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper () Zinc ())

#### **14.3. Transport hazard class(es)**

##### **14.3.1. Overland transport**

ADR/RID : tunnel restriction code : E

Class(es) : 9 - Miscellaneous dangerous substances and articles

Hazard identification number (Kemler No.) : 90

Classification code : M7

ADR/RID-Labels : 9 - Miscellaneous dangerous substances and articles



##### **14.3.2. Inland waterway transport (ADN)**

Class (UN) : 9

##### **14.3.3. Transport by sea**


Class or Division : 9 - Miscellaneous dangerous substances and articles

##### **14.3.4. Air transport**

Class or Division : 9 - Miscellaneous dangerous substances and articles

#### **14.4. Packing group**

Packing group : III

|   |                          |                         |
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#### **14.5. Environmental hazards**

Environmental hazards : N



Other information : Not applicable.

#### **14.6 Special precautions for user**

Special precautions for user : Not applicable.

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

Code: IBC : Not applicable.

### **SECTION 15: Regulatory information**

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

##### **15.1.1. EU-Regulations**

Restrictions on use : Not applicable

This product contains an ingredient according to the candidate list of Annex XIV of the REACH Regulation 1907/2006/EC.

: none

Authorisations : Not applicable

##### **15.1.2. National regulations**

DE : WGK : 2

DE : TA-Luft : Total dust

DE : Technische Regeln für Gefahrstoffe (TRGS) : applicable

FR : Installations classées : 117X

NL : ABM : 4 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. (A)

NL : NeR (Nederlandse emissie Richtlijn) : Inorganic substances in powdered form


#### **15.2. Chemical safety assessment**

Chemical Safety Assessment : For this substance a chemical safety assessment has been carried out.  
Copper  
Zinc

### **SECTION 16: Other information**

Full text of R-, H- and EUH-phrases:

Aquatic Acute 1 : Hazardous to the aquatic environment - Aquatic Acute 1  
 Aquatic Chronic 1 : Hazardous to the aquatic environment - chronic hazard category 1  
 Aquatic Chronic 3 : Hazardous to the aquatic environment - chronic hazard category 3  
 H400 : Very toxic to aquatic life.  
 H410 : Very toxic to aquatic life with long lasting effects.  
 H412 : Harmful to aquatic life with long lasting effects.  
 R50 : Very toxic to aquatic organisms.  
 R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 R53 : May cause long-term adverse effects in the aquatic environment.  
 N : Dangerous for the environment

|  |                          |                         |
|--|--------------------------|-------------------------|
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Key literature references and sources : European Metal Particulate Association (EMPA) for data

Abbreviations and acronyms :

- 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
- TWA = time weighted average
- STEL = Short term exposure limit
- PBT = persistent, bioaccumulating and toxic (PBT).
- vPvB = very persistent and very bioaccumulating
- EWC = European Waste Catalogue
- NA = Not applicable

The contents and format of this SDS are in accordance with EEC Commission Directive 1999/45/EC, 67/548/EC, 1272/2008/EC and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

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