



MATERIAL SAFETY DATA SHEET

[in accordance with the criteria of regulation no 1907/2006 (REACH) and 453/2010]

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

1.1 Product identifier

Goldie Bronze Hard™, Goldie Bronze Soft™, Goldie de la Rosa Bronze™, Goldie Roman Bronze™, Goldie Copper™, Goldie Snow Bronze™

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

Relevant identified uses: for production of jewelry through the sintering process

Uses advised against: not determined.

1.3 Details of the supplier of the safety data sheet

Manufacturer: **Goldie Clay™ Waldemar Howiecki Pracownia Artystyczna**

Address: ul. Piękna 20, 00-549 Warszawa, Poland

Telephone/Fax number: +48 604 580 472

E-mail address for a competent person responsible for SDS: biuro@theta-doradztwo.pl

1.4 Emergency telephone number

+48 604 580 472

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Human health hazards

Not classified as dangerous for human health.

Environmental effects

Not classified dangerous for the environment.

Physicochemical adverse effects

None.

2.2 Label elements

Hazard symbols

None.

Substance name for labeling

Not applicable

Risk phrases

None.

Safety phrases

None.

2.3 Other hazards

There is no information whether the substance or mixture meets criteria for PBT or vPvB in accordance with Annex XIII of Regulation REACH. Suitable researches were not conducted.

Section 3: Composition/information on ingredients

3.1 Substances

Not applicable.



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3.2 Mixtures

copper

Concentration:	75-100%
CAS number:	7440-50-8
EC number:	231-159-6
Registration number:	substance comes under the law of temporary period
Classification acc. to 67/548/EC:	not classified
Classification acc. to 1272/2008/EC:	not classified

tin

Concentration:	2-35%
CAS number:	7440-31-5
EC number:	231-141-8
Registration number:	substance comes under the law of temporary period
Classification acc. to 67/548/EC:	not classified
Classification acc. to 1272/2008/EC:	not classified

proprietary binder

Concentration:	0,2-15%
CAS number:	-
EC number:	-
Registration number:	substance comes under the law of temporary period
Classification acc. to 67/548/EC:	not classified
Classification acc. to 1272/2008/EC:	not classified

Full text of each relevant R and H phrases is given in section 16 of SDS.

Section 4: First aid measures

4.1 Description of first aid measures

Skin contact: wash the contaminated skin with plenty of water with soap. Get medical attention if irritation develops or persists.

Eye contact: protect the non-irritated eye, remove contact lenses. Wash the contaminated eye with plenty of low-pressure water for at least 15 minutes. Avoid powerful water stream – risk of cornea damage. Get medical attention if irritation persists.

Ingestion: emergency treatment – rinse mouth immediately, then drink plenty of water. Remove by gastric lavage (i.e., stomach tube) unless patient is vomiting. Get medical attention as soon as possible. Never give anything by mouth to an unconscious person.

Inhalation: move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Keep the affected person warm and at rest. Get medical attention as soon as possible.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact: does not cause symptoms.

Eye contact: may cause mechanical irritation.

Ingestion: may cause irritation of mucous membrane; vomiting and collapse; acute poisoning is characterized by hemolysis, jaundice, anuria, hypotension and convulsions.

Inhalation: may cause irritation of mucous membrane; metal fume-fever, metallic taste and nasal ulceration and perforation after acute exposure; inhalation of dusts may cause respiratory tract irritation



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4.3 Indication of any immediate medical attention and special treatment needed

Physician makes a decision regarding further medical treatment after thoroughly examination of the injured.

Section 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: water spray, dry chemical, foam, carbon dioxide or clean extinguishing agents. Adjust fire fighting measures to the surrounding materials.

Unsuitable extinguishing media: water jet – risk of the propagation of the flame.

5.2 Special hazards arising from the substance or mixture

During the fire, the product may produce hazardous fumes containing carbon monoxides and dioxides. Do not inhale combustion products, they can be dangerous for human health. Static charges generated by emptying the package or contact with flammable vapours may cause flash fire. May form flammable dust-air mixtures.

5.3 Advice for firefighters

Personal protection typical in case of fire. Self-contained breathing apparatus and protective clothing should be worn.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Limit the access for the outsiders into the breakdown area, until the suitable cleaning operations are completed. Avoid wetting spills, as surfaces subject to spills may become slippery. Avoid skin and eye contamination. Avoid breathing dusts.

6.2 Environmental precautions

In case of large releases, prevent the substance from spreading into the environment. Notify relevant emergency services.

6.3 Methods and material for containment and cleaning up

Collect mechanically avoiding formation of dusts and put it in a hermetic package. Collected material treat as waste. Place the damaged package in a protective container. Wash affected area with plenty of water.

6.4 Reference to other sections

Appropriate conduct with waste product – see section 13.

Section 7: Handling and storage

7.1 Precautions for safe handling

Handle in accordance with good occupational hygiene and safety practices. Avoid skin and eye contamination. Avoid breathing vapours. Before break and after work wash hands carefully. Avoid conditions that generate dust; product may form flammable dust-air mixtures. Avoid emptying package in or near flammable vapours. Static charges may cause flash fire. Keep away from heat, flame, sparks and other ignition sources.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area at approximately 20°C. Keep container closed when not in use.

7.3 Specific end use(s)

For production of jewelry through the sintering process



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Section 8: Exposure controls/personal protection

8.1 Control parameters

For tin:

- ACGIH Threshold Limit Value (TLV): 2 mg/m³ (TWA)
- OSHA Permissible Exposure Limit (PEL): 2 mg/m³ (TWA)

For copper:

- ACGIH Threshold Limit Value (TLV): 0,2 mg/m³ (TWA)
- OSHA Permissible Exposure Limit (PEL): 0,1 mg/m³ (TWA)

Legal basis: Commission Directive 2000/39/EC.

8.2. Exposure controls

Handle in accordance with good occupational hygiene and safety practices. Do not eat, drink and smoke during the work. Before break and after work wash hands carefully. Avoid contact with skin and eyes. Avoid breathing dusts and vapours. Eye-wash fountain and soap and water station should be installed near the working place. Sufficient ventilation, in volume and pattern, should be provided to keep air contamination below current applicable OSHA permissible limits.

Hand and body protection

Use protective gloves in case of a prolonged and repeated contact with skin.

The material that the gloves are made of must be impenetrable and resistant to the product's effects. The selection of material must be performed with consideration of breakthrough time, penetration speed and degradation. Moreover, the selection of proper gloves depends not only on the material, but also on other quality features and changes depending on the manufacturer. The producer should provide detailed information regarding the exact breakthrough time. This information should be followed.

Eye/face protection

Use safety goggles with side shields, if needed.

Respiratory protection

Wear supplied air respirator under confined and enclosed spaces, if needed. Sufficient ventilation, in volume and pattern, should be provided to keep air contamination below current applicable OSHA permissible limits.

Personal protective equipment must meet requirements of directive 89/686/CE. Employer is obliged to ensure equipment adequate to activities carried out, with quality demands, cleaning and maintenance.

Relevant procedures for monitoring of dangerous components concentration in the air and procedures for air pureness control at workplace must be applied – if they are available and justified for the workstation in question – in compliance with relevant Standards, considering the conditions in the exposure area and suitable measurement methodology tailored to the working conditions.

Environmental exposure controls

Do not allow the large quantity of product to contaminate ground water, canalization, sewage system or soil. Possible emissions from the ventilation systems and processing equipment should be controlled in order to determinate their compatibility with environmental protection regulations.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

physical state:	powder
colour:	from dark brown, through light brown to red
odour:	odorless
odour threshold:	not determined
pH:	not determined
melting point/freezing point:	not determined
initial boiling point and boiling range:	not determined
flash point:	not applicable, non-flammable
evaporation rate:	not determined
flammability (solid, gas):	not applicable
upper/lower flammability or explosive limits:	not applicable
vapour pressure:	not determined



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vapour density:	not determined
density:	not determined
solubility(ies):	copper, tin: insoluble; proprietary binder: solubility is limited by viscosity
partition coefficient: n-octanol/water:	not determined
auto-ignition temperature:	not applicable
decomposition temperature:	not determined
explosive properties:	do not display
oxidising properties:	do not display
viscosity:	not determined

9.2 Other information

There are no additional test results.

Section 10: Stability and reactivity

10.1 Reactivity

Product is reactive; reacts with oxidants, peroxides, acids and bases.

10.2 Chemical stability

The product is stable under normal conditions.

10.3 Possibility of hazardous reactions

In contact with incompatible materials reacts violently with emission of heat. In contact with acids and bases reacts with liberation of hydrogen.

10.4 Conditions to avoid

Moisture.

10.5 Incompatible materials

Strong oxidants, bromine, chlorine trifluoride, copper nitrate, ammonium nitrate, sodium and potassium peroxide, hydrogen peroxide, sodium nitride, chlorine, acids, bases.

10.6 Hazardous decomposition products

Not known.

Section 11: Toxicological information

11.1 Information on toxicological effects

Information regarding acute and/or delayed results of the exposure was defined on the basis of the information on product's classification and/or toxicological studies as well as the experience and knowledge of the manufacturer.

Acute component toxicity

Tin

In the form of dust or fumes is irritating. May cause shortness of breath, fever, general weakness, sweating, resolving without treatment (so-called smoke-induced fever metals). Dusts may cause mechanical irritation of the conjunctiva with tearing, pain, congestion.

Toxicity for mixture

acute toxicity

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

irritation

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

corrosivity

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



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sensitisation

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

repeated dose toxicity

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

carcinogenicity

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

mutagenicity

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

toxicity for reproduction

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

Section 12: Ecological information

12.1 Toxicity

No specific toxicity test results. This product is not classified as dangerous for the environment.

12.2 Persistence and degradability

Not biodegradable.

12.3 Bioaccumulative potential

Danger of cumulative effects in aquatic organisms.

12.4 Mobility in soil

Product is mobile in soil and aquatic environment.

12.5 Results of PBT and vPvB assessment

Not applicable.

12.6 Other adverse effects

Product does not have any influence on global warming and destruction of the ozone layer.

Section 13: Disposal considerations

13.1 Waste treatment methods

Disposal methods for the product: reuse in accordance with the local, state and federal regulations. Waste code should be given in the manufacturing place.

Disposal methods for used packing: reuse/recycle/liquidate empty containers dispose in accordance with the local, state and federal regulations. Only containers completely empty can be reused.

Legal basis: Directive 2008/98/EC, 94/62/EC.

Section 14: Transport information

14.1 UN number

Not applicable.

14.2 UN proper shipping name

Not applicable.

14.3 Transport hazard class(es)

Not applicable.

14.4 Packing group

Not applicable.



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14.5 Environmental hazards

Not applicable.

14.6 Special precautions for user

There are no special precautions..

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

Not applicable.

Section 15: Regulatory information

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

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Text with EEA relevance).

Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances.

Directive 1999/45/EC of the European Parliament and of the Council of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations.

Commission Regulation (EC) No 790/2009 of 10 August 2009 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (Text with EEA relevance).

Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Text with EEA relevance).

2008/98/EC of the European Parliament and of the Council of 19. November 2008 on waste.

European Parliament and Council Directive 94/62/EC of **20 December 1994 on packaging and packaging waste.**

15.2 Chemical safety assessment

None.

Section 16: Other information

Clarification of aberrations and acronyms

PBT Persistent, Bioaccumulative and Toxic Substances
vPvB very Persistent and very Bioaccumulative Substances

Trainings

Before commencing working with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training.

Other data

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The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. That does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field.