

## Material Safety Data Sheet

Safety Data Sheet dated 23/10/2003, version 1

### 1. IDENTIFICATION OF THE PRODUCT

Product name: Ancient Bronze Casting Grain  
Product type and use: Non ferrous alloy for jewellery manufacturing industry

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components within the meaning of EEC directive 67/548 and corresponding classification:  
10% tin  
90% copper

### 3. HAZARDS IDENTIFICATION

The product may present a risk of carcinogenesis.  
If brought into contact with the skin, the product may cause sensitisation of the skin.

### 4. FIRST AID MEASURES

Contact with skin:  
Immediately take off all contaminated clothing.  
Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Contact with eyes:  
Do not use eyewash or ointment of any kind (before obtaining an examination or advice from an eye specialist).  
Wash immediately with water for at least 10 minutes.

Swallowing:  
Induce vomiting. SEEK A MEDICAL EXAMINATION IMMEDIATELY and present the safety-data sheet.

A suspension of activated charcoal in water, or liquid paraffin may be administered.

Inhalation:  
Ventilate the premises. The patient is to be removed immediately from the contaminated premises and made to rest in a well ventilated area. Should the patient feel unwell, OBTAIN MEDICAL ATTENTION.

### 5. FIRE-FIGHTING MEASURES

Recommended extinguishers:  
Water, CO<sub>2</sub>, Foam, Chemical powders, according to the materials involved in the fire. Avoid water on high temperature metals (risk of explosion)

Extinguishers not to be used:  
None in particular.

Risks arising from combustion:  
Avoid inhaling the fumes.

Protective equipment:  
Use protection for the respiratory tract.

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## 6. ACCIDENTAL RELEASE MEASURES

Measures for personal safety:

Use a mask, gloves and protective clothing.

Environmental measures:

Limit leakages with earth or sand.

If the product has escaped into a water course, into the drainage system, or has contaminated the ground or vegetation, notify the competent authorities.

Cleaning methods:

Rapidly recover the product. To do so, wear a mask and protective clothing.

If the product is in a liquid form, stop it from entering the drainage system.

Recover the product for re-use if possible, or for elimination. The product might, where appropriate, be absorbed by inert material.

After the product has been recovered, rinse the area and materials involved with water.

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## 7. HANDLING AND STORAGE

Handling precautions:

Avoid contact and inhalation of the vapours. See, too, paragraph 8 below.

Do not eat or drink while working.

Incompatible materials:

None in particular.

Storage conditions:

Instructions as regards storage premises:

Adequately ventilated premises.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Precautionary measures:

Give adequate ventilation to the premises where the product is stored and/or handled.

Respiratory protection:

Not needed for normal use.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Eye protection:

Not needed for normal use.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and colour:	Bronze grained alloy
Odour:	Odourless
pH:	n.a.
Melting point:	900-1000°C
Boiling point:	n.d.
Flash point:	n.a. ° C
Solid/gas flammability:	n.a.
Autoignition temperature:	n.a.
Explosive properties:	n.a.
Oxidizing properties:	n.a.
Vapour pressure:	n.d.
Relative density:	7.5-8.5 g/cm <sup>3</sup>
Solubility in water:	Unsoluble in water
Lipid solubility:	Unsoluble in organic solvents

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## 10. STABILITY AND REACTIVITY

Conditions to avoid:

Stable under normal conditions.

Substances to avoid:

Reacts with strong mineral acids, leading to complete solubilization and flammable gas generation (Hydrogen).

Hazardous decomposition products:

None.

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## 11. TOXICOLOGICAL INFORMATION

The concentration of each substance should be borne in mind in assessing the toxicological effects deriving from the preparation.

Copper

TLV-TWA: 0.2mg/m<sup>3</sup>

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## 12. ECOLOGICAL INFORMATION

Adopt good working practices, so that the product is not released into the environment.

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## 13. DISPOSAL CONSIDERATIONS

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

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## 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

ADR-UN number: Not dangerous

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## 15. REGULATORY INFORMATION

88/379/EEC (Classification and Labelling):

Symbols:

Xn Harmful

R Phrases:

R40 Limited evidence of a carcinogenic effect.

R43 May cause sensitization by skin contact.

S Phrases:

S13 Keep away from food, drink and animal feedingstuffs.

S46 If swallowed, seek medical advice immediately and show this container or label.

S2 Keep out of reach of children.

S36/37 Wear suitable protective clothing and gloves.

Notes:

PACK2 The packing must have tactile indications of danger for blind people.

Contents:

nickel

Where applicable, refer to the following regulatory provisions :

Directive 2003/105/CE ('Activities linked to risks of serious accidents').

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## 16. OTHER INFORMATION

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

ACGIH - Treshold Limit Values - 1997 edition

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