

# Chemical Safety Data Sheet

## SECTION 1 IDENTIFICATION

Product Name: Bronze Powder

Other Name: Copper

Recommended use of the chemical and restrictions on use: Products are used in paints and coatings

Supplier's details: shan dong jie han metal material co.,ltd

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Web:www.jhaluminiumpaste.com

Emergency phone number: /

## SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Environmentally Hazardous Substance

GHS Label elements, including precautionary statements

Category of Dangerous Goods: 9



Signal word: Danger.

Hazard statement(s): Environmentally hazardous substance.

Precautionary statement(s):

Main hazards: Main hazards: Harm to the aquatic environment (acute) category I

Harm to the aquatic environment (chronic) Category I

Product effects: Adverse effects to the health

Inhalation: High particle concentrations in the air may cause irritation of airways and digestive system.

Skin: Frequent and prolonged contact with the skin may cause irritation and dermatitis.

Eyes: Is a lightly irritating product, but do not cause lesion on conjunctiva.

Ingestion: May provoke irritation of the airways and digestive system.

Bronze powder has low toxicity, but in chronical exposition, organs like kidney, liver and milt could be affected.

Environmental effects

Air: High concentrations pollute the air, becoming improper for the human being.

Water: Due to be insoluble, the product remain on the water affecting its use.

## SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration%
Copper	7440-50-8	68-71%
Zinc	7440-66-6	28-31%
Stearic acid	57-11-4	1-1.5%

#### SECTION 4 FIRST AID MEASURES

First Aid Measures:

Inhalation: Remove the victim from the contaminated area. Provide medical care.

Skin Contact: Wash with running water and soap.

Eyes Contact: Do not rub. Wash with running water for 15 minutes (minimum).  
Look for an ophthalmologist.

Ingestion: Do not provoke vomit. Provide medical care.

Notes for the doctor: according to the information in this MSDS.

#### SECTION 5 FIREFIGHTING MEASURES

Appropriate extinction means: Extinguishing agents, class "D" (Special Chemical Powder), and inert material (thin and dry sand).

Non appropriate extinction means: Extinguishing agents class "A", "B" and water.

Specific hazards: It can liberate: carbon dioxide (CO<sub>2</sub>) and carbon monoxide gas (CO), irritating and toxicant gases.

Specific methods: To combat the fire should be used extinguishing agents class "D" (Special Chemical Powder) or inert material (thin and dry sand). The fire must be carefully covered with these agents, with extreme care to avoid formation of powder clouds.

The material must be inert until its temperature is equalled to the ambient temperature.

Remove the burned material carefully from the place, in small portions, always maintaining the superficial part covered with sand.

Firemen's protection: Use respiration protection equipment and special clothes for high temperatures.

#### SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Remove all ignition sources.

Clean up all spills immediately. Control personal contact by using protective equipment.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up: Clean up all spills immediately. Collect recoverable product into labelled containers for recycling.

#### SECTION 7 HANDLING AND STORAGE

Handling:

Technical measures:

Worker exposure prevention: Adopt the measures recommended in the Environmental Risks Prevention Program, implement biological monitoring according to the Occupational Health

Medical Control Program established by the local legislation.

Explosion and fire prevention: Eliminate heat and ignition sources.

Do not smoke.

Avoid contact with high concentrations of humidity.

Precautions for safety handling: Handling according to the appropriate operational procedures and safety norms.

Orientations for safe handling: Obey strictly the established safety procedures and norms and: Avoid continued and repeated exposure or contact with product.

Do not reuse the packing. Do no smoke.

The packing in use must be maintained closed after removing the product. Storage:

< Appropriate technical measures: Store the product in covered, dry and ventilated areas distant from heat, ignition sources and incompatible materials.

Keep packing always closed.

Storage conditions:

Appropriate: Covered, dry and ventilated areas.

To avoid: Confined places and heat sources.

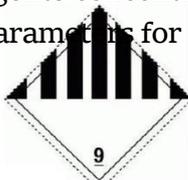
Safety Signs: Packing labels and place signs.

Incompatible products and materials: Keep away from halogenated products, peroxides, alkalis and acids.

### SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering control measures: Implement environmental monitoring and adopt general or personal measures (Collective Protection Equipment or Personal Protection Equipment) to maintain the agents' concentrations below the action levels.

Parameters for specific control:



Occupational exposure limits:

Brazilian Legislation:

Tolerance Limit – NR-15	Annexed 11	
Chemical Agent	PPM	Mg/m <sub>3</sub>
Copper	Not established	Not established
Zinc	Not established	Not established

International Reference:

Tolerance Limit – ACGIH - TWA		
Chemical Agent	PPM	Mg/m <sub>3</sub>
Copper	0.38	1
Zinc	Not established	Not established

Recommended procedures for monitoring: Use resources approved by the Brazilian legislation (NR-9 and NR-15) and international references (ACGIH, OSHA, NIOSH).

Personal protection equipment: According to local legislation's requirements, such as:

Respiration protection: Mask with protective filter against metal powder.

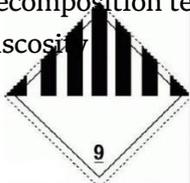
Hand protection: Impermeable gloves, protective cream.

Eyes protection: Safety glasses

Skin and body protection: Appropriate clothes, gloves, protective cream according to handling.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid powder..
Color	Characteristic golden.
Odour	Characteristic.
Odour Threshold	/
pH	Not applicable for metal ic pigment.
Melting point/freezing point	/
Initial boiling point and boiling range	/
Flash point	Not applicable.
Evaporation rate	/
Flammability (solid, gas)	/
Explosion limits:	Inferior Explosion Limit = not applicable Superior Explosion Limit = not applicable
Vapour pressure	/
Density	0.6-1.2g/cm <sub>3</sub> at 20°C
Solubility	/Insoluble in water,petroleum hydrocarbons, and organic solvents.
Autoignition temperature	/
Decomposition temperature	/
Viscosity	/



## SECTION 10 STABILITY AND REACTIVITY

Instability: The product is stable in normal storage conditions.

Dangerous reactions: With incompatible substances.

Conditions to avoid: Heat and ignition sources, high temperatures and contact with water and incompatible substances.

Incompatible materials or substances: Halogenated products, peroxides, alkalis and acids.

Dangerous decomposition products: They can be generated in the product combustion: carbon dioxide, carbon monoxide gas.

## SECTION 11 TOXICOLOGICAL INFORMATION

Information according to the different exposure means:

Sharp Toxicity:

Inhalation: High concentrations of particles may cause irritation of the airways and digestive system.

Skin: Frequent and prolonged contact with the skin may cause irritation and dermatitis.

Eyes: Is a lightly irritating product, but do not cause lesion on conjunctiva.

Ingestion: May provoke irritation of the airways and digestive system. Bronze powder has low toxicity, but in chonical exposition, organs like kindney, liver and milt could be affected

Local effects: It may cause irritation.

## SECTION 12 ECOLOGICAL INFORMATION

Environmental effects, behavior and impacts of the product:

Mobility: All actions must be in accordance to local environmental agencies' requirements.

Environmental Impact: Product insoluble in water.

## SECTION 13 DISPOSAL CONSIDERATIONS

Treatment and disposition methods:

Product: According to the effective local legislation (Coproducting/incineration/industrial Embankment). Do not throw this product in sewers, rivers, lakes and fountainheads.

Residue of the product: Residues that won't be used must be discarded according to the effective Local legislation.

Contaminated packing: Do not reuse the packing.

## SECTION 14 TRANSPORT INFORMATION

UN number: 3077

UN proper shipping name: Environmentally Hazardous Substance, Solid, N.O.S. (copper)/Class or Division / UN3077

Transport hazard class(es): 9

Packaging group: III

Special precautions for user: /

## SECTION 15 REGULATORY INFORMATION

Regulations: This safety data sheet is in compliance with the following national standards:

GB16483-2008, GB13690-2009, GB6944-2005, GB/T15098-2008, GB18218-2009,

GB15258-2009, GB6944-2005, GB190-2009, GB191-2009, GB12268-2008, GA57-1993, GB/T 15098-2008, GBZ 2-2007 as well as the following national regulations: Dangerous Goods Transport Administrative Regulation, Dangerous Chemicals Safety Administrative Regulation, United Nations Regulations on the Transport of Dangerous Goods (UN RTDG)

## SECTION 16 OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing MSDS: Technology Dep.

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