Jinhua Beiduo Import & Export Co.,Ltd.
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Date: May 30,2019

Safety Data Sheet

1.Supplier and product

Jinhua Beiduo Import & Export Co.,Ltd.
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Product: Phosphorus-Copper alloy rods/rings Code BCuP-2, BCuP-3, BCuP-5
Product Identification: AWS A5.8
Product size: Variable
Product Use(s): for copper alloys brazing.

2.Hazards identification

Classification of the substance/mixture.
The product is placed on the market in solid form
Classification in accordance with GHS-US
Resp.Sens 1B H334
Skin Sens. 1 H317

GHS07 GHS08

Label elements:
GHS-US labeling
Hazard Pictograms (GHS-US):
Signal word (GHS-US): **Danger**
Hazard statements (GH5-US):
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction
Precautionary statements:
P285 In case of inadequate ventilation wear respiratory protection.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: call a POISON CENTER or doctor or physician if you feel unwell.
P302+P350 IF ON SKIN: Gently wash with plenty of soap and water.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P501 Dispose of contents and container in accordance with local regional/national international regulations.
Other hazards: No additional information available
Unknown acute toxicity (GHS-US): No data available

3. Composition/information on ingredients

Substances: No data available
Full text of H-phrases: see section 16
Mixtures: The mixture contains dangerous substances:

Ingredient	CAS Number	% wt.	GHS note
Copper (Cu)	7440-50-8	77-95	Flam Sol. 1H228, Auatic Acute 1 H400
Silver (Ag)	7440-22-4	0-15	Not Clasified
Phosphorus (P)	7723-14-0	5-8	Flam. Sol2; Aquatic Acute 3, Aquatic Chronic 3; H228, H412

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Composition comments:
The term “Hazardous Ingredients” should be interpreted as a term defined in Hazard Communication standards and does not necessarily imply the existence of a hazard. The product may contain additional nonhazardous ingredients or may form additional compounds under the condition of use.

4. First aid measures

Description of first aid measures:
First-aid measures after inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and getmedical attention.

First-aid measures after skin contact: Flush with water for at least 15 minutes. Seek medical attention if irritation develops or persists.

First-aid measures after eye contact: Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention if discomfort persists.

First-aid measures after ingestion: Do NOT induce vomiting. Get immediate medical attention.

Most important symptoms and effects, both acute and delayed:
Symptoms/injuries after inhalation: Short-term (acute) overexposure to the gases, fumes, and dusts may include irritation of the eyes,lungs, nose, and throat. Some toxic gases associated with welding may cause pulmonary edema, asphyxiation, and death.
Acute overexposure may include signs and symptoms such as watery eyes, nose and throat irritation, headache, dizziness, difficulty in breathing, frequent coughing, or chest pain. The presence of chromium/chromate in fume can cause irritation of nasal membranes and skin. The presence of nickel compounds in fume can cause metallic taste, nausea, tightness of chest, fever, and allergic reaction. Excessive inhalation or ingestion of manganese can produce manganese poisoning. Overexposure to manganese compounds may affect the central nervous system, symptoms of which are languor, sleepiness, muscular weakness, emotional disturbances, and spastic gait resembling parkinsonism. These symptoms can become progressive and permanent if not treated. Excessive inhalation of fumes may cause "Metal Fume Fever" with Flu-like symptoms such as chills, fever, body aches, vomiting, sweating, etc.

Symptoms/injuries after skin contact: Dusts may cause irritation.
Symptoms/injuries after eye contact: Causes eye irritation.
Symptoms/injuries after ingestion: Not an anticipated route of exposure during normal product handling. May be harmful if ingested.

Indication of any immediate medical attention and special treatment needed: No data available

5 Fire-fighting measures

Extinguishing media:
Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media: No data available.

Special hazards arising from the substance or mixture: Fire may produce irritating or poisonous gases.
Fire hazard: Not flammable
Explosion hazard: None known
Advice for firefighters: In the event of fire, wear self-contained breathing apparatus and full protective gear.

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6 Accidental release measures

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Wear appropriate personal protective equipment as specified in Section 8. Ensure adequate ventilation.

For emergency responders: No data available.

Environmental precautions: Avoid release into the environment. Avoid dispersal of spilled material and contact with soil, ground and surface
water drains and sewers.

Methods and material for containment and cleaning up: Take up mechanically. Collect the material in labeled containers and dispose of according to local and regional authority requirements.

Reference to other sections: See Section 7 for information of safe handling. See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Personal precautions, protective equipment and emergency procedures

If airborne dust and/or fume is present, use adequate engineering controls and, if needed, personal protection to prevent overexposure. Refer to recommendations in Section 8.

Environmental precautions:

Avoid release to the environment.

Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up:

Clean up spills immediately, observing precautions in the personal protective equipment in Section 8. Avoid generating dust. Prevent product from entering any drains, sewers or water sources. (Continued on Page 4)

Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

Dispose contaminated material as waste according to item 13.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Precautions and safe handling: Welding may produce dust, fumes and gases hazardous to health. Avoid breathing dust, fumes and gases.

Use adequate ventilation. Keep away from sources of ignition. Avoid contact with skin, eyes and clothing. Do not eat, drink and smoke in work
areas.

Conditions for safe storage, including and incompatibilities: Store in cool, dry and well-ventilated place. Keep away from incompatible materials. Keep away from heat and open flame.

Specific end use(s): For welding consumables and related products.

8 Exposure controls/personal protection

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Copper	**(CAS No) 7440-50-8**	
USA ACGIH	ACGIH (TWA) (mg/m3)	1 mg/m3
USA OSHA	OSHA PEL (TWA) (mg/m3)	1 mg/m3
Silver	**(CAS No) 7440-22-4**	
USA ACGIH	ACGIH (TWA) (mg/m3)	100 mg/m3
USA OSHA	OSHA PEL (TWA) (mg/m3)	10 mg/m3
Phosphorus	**(CAS No) 7423-14-0**	
USA ACGIH	ACGIH (TWA) (mg/m3)	0.1 mg/m3
USA OSHA	OSHA PEL (TWA) (mg/m3)	0.1 mg/m3

Exposure controls:

Appropriate engineering controls: local exhaust and general ventilation must be adequate to meet exposure standards.
Hand protection: Wear welding gloves.

Eye protection: Wear helmet or face shield with filter lens of appropriate shade number. See ANSI/ASC Z49.1 Section 4.2. Provide protective screens and flash goggles, if necessary, to shield others.

Skin and body protection: Wear head and body protection, which help to prevent injury from radiation, sparks, flame and electrical shock.

See ANSI Z49.1. At a minimum this includes welder's gloves and a protective face shield, and may include arm protectors, aprons, hats, shoulder protection, as well as dark substantial clothing. Train the employee not to touch live electrical parts and to insulate him/herself from work and ground. Welders should not wear short sleeve shirts or short pants.

Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

9. Physical and chemical properties

Physical state:	- Solid
Appearances:	- Wire
Color:	- Silver gray
Odor:	- None
Odor threshold:	- No data available
pH:	- No data available
Relative evaporation rate (butyl acetate = l):	- No data available
Melting point:	- 637 C
Freezing point:	- No data available
Initial boiling point and boiling range:	- No data available
Flash point:	- No data available
Self ignition temperature:	- No data available
Decomposition temperature:	- No data available
Flammability (solid, gas):	- No data available
Vapour pressure:	" No data available
Relative vapour density at 20· C:	- No data available
Relative density:	- No data available
Solubility(ies)	- No data available
Log Pow:	- No data available
Log Kow:	- No data available

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Viscosity, kinematic:	- No data available
Viscosity, dynamic:	- No data available
Explosive properties:	- No data available
Oxidizing properties:	- No data available
Explosive limits:	- No data available

Other information: No additional information available

10. Stability and reactivity

Reactivity: No additional information available.
Chemical stability: The product is stable under normal conditions. When using it may produce dangerous fumes and gases.
Possibility of hazardous reactions: Will not occur.
Conditions to avoid: None
Incompatible materials: None
Hazardous decomposition products: Welding fumes and gases cannot be classified simply. The composition and quantity of both are dependent upon the metal being welded, the process, procedure and welding consumables used. Other conditions which also influence the composition and quantity of the fumes and gases to which workers may be exposed include: coating on the metal being welded (i.e. paint, painting, galvanizing), the number of welders, the volume of the work area, the quality and the amount of ventilation, the position of the welders head with respect to the fume plume, as well as the presence of contaminants in the atmosphere (such as chlorinated hydrocarbon vapors from the cleaning and degreasing activities).
When an electrode is consumed, the fume and gas decomposition products generated are different in percent and form from the ingredients listed in Section 3. Fume and gas decomposition, and not the ingredients in the electrode, are important. The concentration of a given fume or gas component may decrease or increase by many times the original concentration. Also, new compounds not in the electrodes may form.
Decomposition products of normal operation include those originating from the volatilization, reaction or oxidation of the materials shown in Section 3, plus those from the base metal coating, etc., as noted above. Reasonable expected fume constituents of this product would include: Complex oxides of iron, manganese, silicon, chromium, nickel, columbium, molybdenum, copper, carbon dioxide, carbon monoxide, ozone and nitrogen Oxides. Some products will also contain antimony, barium, molybdenum, aluminum, columbium, magnesium, strontium, tungsten, and or zirconium. Fume limit for chromium, nickel and or manganese may be reached before limit of 5 mg/m3 of general welding fumes is reached.
Gaseous reaction products may include carbon monoxide and carbon dioxide. Ozone and nitrogen oxides may be formed by the radiation from the arc. Determine the composition and quantity of fumes and gases to which workers are exposed by taking an air sample from inside the welder's helmet if worn or in the worker's breathing zone. Improve ventilation if exposures are not below limits. See ANSI/AWS Fl.!, Fl.3 and Fl.5, available from the American Welding Society, 550 N.W. Lejeune Road, Miami, FL 33126.

11. Toxicological information

Information on Toxicological Effects – Product
Acute toxicity: Harmful if swallowed

Substance name	CAS number	LD5O oral rat (mg/kg)	ATE (oral) (mg/kg)	Comments
Copper	7440-50-8	>2000 mg/kg	>2000mg/kg	
Silver	7440-22-4			
Phosphorus	7723-14-0	>15,000 mg/k		

Skin corrosion/irritation: Poss irritant

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Serious eye damage/irritation: Poss irritant
Respiratory or skin sensitization: May cause an allergic skin reaction.
Germ cell mutagenicity: Not classified
Carcinogenicity: May cause cancer.

Reproductive toxicity: Not classified
Specific target organ toxicity (single exposure): Not classified
Specific target organ toxicity (repeated exposure): Not classified
Aspiration hazard: Not classified

12. Ecological information

Toxicity:

Ecology - general: Toxic to aquatic life

Copper	**(CAS No) 7440-50-8**
LC50 fishes 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])
EC50 other aquatic organisms 1	0.0426 - 0.0535 mg/l (Exposure time: 72 h - species: Pseudokirchneriella subcapitata[static])
LC50 fish 2	< 0.3 mg/l (Exposure time: 96 h - species: Pimephales promelas ([static])
EC50 other aquatic organisms 2	0.031 - 0.054 mg/l (Exposure time: 96 h - species: Pseudokirchneriella subcapitata[static])
Silver	**(CAS No) 7440-22-4**
BCF fish 1	(no bioaccumulation expected)
Phosphorus	**(CAS No) 7723-14-0**
LC50 fishes 1	33.2 mg/l (Exposure time: 96 h - species: Danio rerio [semi-static])
EC50 other aquatic organisms 1	105 mg/l (Exposure time: 48 h - species: Daphnia magna[static])

Persistence and degradability: No additional information avail
Bioaccumulative potential: No additional information available
Mobility in soil: No additional information available.
Other adverse effects: No additional information availabl

13. Disposal considerations

Waste treatment methods: Dispose of in accordance with local and national regulations.
Waste disposal recommendations: Dispose of contents/container in accordance with local/regional/national/international regulations.

14. Transport information

In accordance with DOT I ADR I RID I ADNR I IMDG I ICAO I IATA
UN Number: Not a dangerous good in sense of transport
UN proper shipping name: Not applicable

15. Regulatory information

Copper (CAS No) 7440-50-8
Listed on the United States TSCA (Toxic Substances Control Act) Inventory
Listed on SARA Section 313 (Specific toxic chemical listings)
SARA Section 313 - Emission Reporting 1.0%
Silver (CAS No) 7440-22-4

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Listed on the United States TSCA (Toxic Substances Control Act) Inventory
Phosphorus (CAS No) 7723-14-0
Listed on the United States TSCA (Toxic Substances Control Act) Inventory
Listed on SARA Section 313 (Specific toxic chemical listings)
SARA Section 313 - Emission Reporting 1.0% (dust or fume only)

16. Other information including information on preparation and revision of the SDS

Full text of H-phrases:

H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction
P285	In case of inadequate ventilation wear reparatory protection
P280	Wear protective gloves/protection clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: call a POISON CENTER or doctor or physician if you feel unwell
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P302+P350	IF ON SKIN: Gently wash with plenty of soap and water
P501	Dispose of contents/container in according with local/regional/national regulations

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