1. Company

GWO CHERN INDUSTRIAL CO . , LTD .
No. 151, Ln. 309, Haihu N. Rd., Luzhu Dist., Taoyuan City 338025 , Taiwan (R.O.C.)

TEL ： 03-3541306 ~ 8
FAX ： 03-3542518
E-MAIL ： kcqc@gwo-chern.com.tw
Emergency phone number ： 03-3541306
Responsible authority ： QA
Supervisor ： Kevin Huang
Revised ：09/JAN/2023

Report Name ： Brass
Product Number ： SDS C5102、C5191

2. Hazards identification

2-1. Symbols： Danger , Warning



2-2. Important Hazards Effort

2-2-1. Health effort ： Not data available，description in Unit 11
2-2-2. Environment effort： description in Unit 12
2-2-3. Physical and chemical properties： description in Unit 10
3-3. Special effort： Not data available
3-4. Symptom： Not date available
3-5. Classification： Not date available

（Note1）Products in the solid product is not hazardous，dust or mist arising from a health hazard under the US OSHA，For the human eye, skin and respiratory system irritation can cause injury Harm, must wear the appropriate protective device.

3. Composition/information on ingredients

3-1. Substance or Mixture： Substance

3-2. Name	Substance	Product identifier（CAS.No.）	concentration or range（%）
Copper	Cu	7440-50-8	Cu+ Sn+ P≧99.5
Tin	Sn	7440-31-5	≦0.20
Phosphorus	P	7723-14-0	4.5~7.0
3-3. Impurities	Substance	Product identifier（CAS.No.）	concentration or range（ppm）
Cadmium	Cd	7440-43-9	≦75

4. First aid measures

4-1. Products for machining, resulting in first aid metal dust and smoke inhalation and direct contact

4-1-1. Eyes contact： A lot of flush contact area at least 15 minutes immediately taken to hospital
4-1-2. Skin contact： Rinse with soap and water, if allergic inflammation shall be taken to hospital
4-1-3. Inhale： Remove to fresh air, keep warm and immediately taken to hospital
4-1-4. Ingestion： Immediately taken to hospital
4-2. Major symptoms and measures： Not date available
4-3. For protection of emergency personnel： Not date available

4-4. For protection of doctor： Not date available
（註一）OSHA： OccupationalSafetyandHealthAdministration

5. Firefighting measures

5-1. Extinguishing Media： Noncombustible, NA
5-2. Special hazards： Noncombustible, NA
5-3. Special fire fighting procedures： Noncombustible, NA
5-4. Special protective equipment Firefighters： Noncombustible, NA

6. Accidental release measures

6-1. Personal protection： Solids, NA
6-2. Environmental protection： Solids, NA
6-3. Methods for cleaning up： Solids, NA

7. Handling and storage

7-1. Handling
7-1-1. Edge and bar products section easy to cut the skin should be carefully
7-1-2. Generating fines should be careful eye and skin contact, should wear protective device
7-1-3. Handling hanging should pay attention to avoid falling or capsized
7-1-4. Packing must pay attention and avoid not end bounce, injury to personnel
7-2. Storage
7-2-1. Store in a dry ventilated indoor place or spatial control of temperature and humidity
7-2-2. Non-exposure to high temperature and humidity outdoors. Avoid with acid, alkali, salt and other substances together store
7-2-3. Keep in flat place.

8. Exposure controls/personal protection

8-1. Management Concentration： Not date available
8-2. Allowable concentration： Powder 0.2mg/m^3
Fog 1mg/m^3
8-3. Countermeasure equipment： Usually it does not require any protective equipment, if the allowable concentration of smoke exceeds the value, must set the local exhaust
8-4. Personal protection
8-4-1. Respiratory protection： There are dust, fine sawdust, powder used.
8-4-2. Eye protection： Wear Safety glasses.
8-4-3. Hand protection： Wear protective gloves.

9. Physical and chemical properties

Outward： Red with metallic luster
Physical state： Solid
Odor： None
Melting/Freezing point： Cu -1085℃、Sn-232℃、P-44℃、Cd-320℃
Boiling point： Cu -2630℃、Sn-2275℃、P-280℃、Cd-767℃
Flash point ： Not data available
Specific gravity ： 8.86
Evaporation rate： Not data available
Flammability（solid、gas）： Non-flammable
Log Kow： Not data available
Solubility： Insoluble in water

Auto-ignition temperature：	Not data available
Decomposition temperature：	Not data available
Dynamic viscosity：	Not data available
Explosive properties：	Non-explosive
Explosive limits：	Not applicable
Oxidation characteristics：	None
Ignition temperature：	None
Vapor pressure：	None

10. Stability and reactivity

10-1. Stability：	Stable under normal conditions
10-2. Conditions to avoid：	Exposure to moist air
10-3. Incompatible materials：	Acids, bases and salts
10-4. Hazardous decomposition products：	Not data available

11. Toxicological information

Alloy no information reported，each element of the relevant information as follows

11-1. Acute toxicity：	Not classified
11-2. Local Effect：	Not data available
11-3. Carcinogenicity：	Not data available
11-4. Chronic or long-term toxicity：	Chronic liver and kidney poisoning hazard
11-5. Symptoms/injuries after skin contact：	Causes skin irritation.
11-6. Symptoms/injuries after eye contact：	Cooper&zinc powder cause eyes contact dermatitis

12. Ecological information

12-1. Toxicity：	Copper concentration in the water on 0.015~3.0mg/1.Harmful to aquatic life. with long lasting effects.
12-2. Persistence and degradability：	No additional information available
12-3. Bioaccumulative potential：	No additional information available
12-4. Mobility in soil：	No additional information available
12-5. Other adverse effect：	No additional information available

13. Disposal considerations

Product not belong to hazardous waste, can delegate shall be discarded recyclers recycling process

14. Transport information

14-1. International transport regulations：	No additional information available
14-2. UN number：	Cu（UNNO.）1325
14-3. Domestic transport regulations：	No additional information available
14-4. Precautions：	Do not direct contact with water，Note that there will be fall and turn over.

15. Regulatory information

15-1. Applicable Regulations：	No specific decree
15-2. International regulations：	Note 1

16. Other information

Other information： None