

# **Brass Powder**

Safety Data Sheet

#### **SECTION 1: IDENTIFICATION**

Product Name: BRASS ALLOY Chemical Name: Metal Alloy

Synonyms: Copper-Zinc Alloys, UNS/CDA Alloy Nos. c20000-c29999

Chemical Family: Copper-Zinc
Formula: Not applicable
Product Use: Metallurgical Products

Name, Address, and Telephone

Company Brick in the Yard 521 Sterling Dr Richardson, TX 75081

(214) 575-5600

**Emergency Telephone Number** 

Emergency Number: Chemtrec (800) 424-9300 or (703)527-3887

## **SECTION 2: HAZARDS IDENTIFICATION**

## **United States (US)**

According to the OSHA 29 CFR 1910.1200 HCS

Health hazards associated with this product only apply in a fume or dust form. Classification of the substance or mixture (Fume or Dust)

Label Elements OSHA HSC 2012



Hazard Statements Causes skin irritation - H315

May cause respiratory irritation - H335

Precautionary statements Avoid breathing dust or fumes - P261

**Prevention** Avoid breathing dust or fumes - P261

Do no get in eyes, on skin, or on clothing - P262

In case of inadequate ventialtion wear respiratory protection - P285

Response

EYE CONTACT: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing. -P305 + P351 + P388

If eye irritation develops. Get medical advice/attention - P313

SKIN CONTACT:

Rinse skin with water/shower - P353

Take off contaminated clothing and wash before reuse - P362 If skin irritation or rash develops, get medical advice/attention - P363

INHALATION If breathing is difficult, remove victim to fresh air and keep at rest in a position

comfortable for breathing - P340 Get medical advice/attention - P363

<u>INGESTION:</u> Not a likely route of exposure for finished metal alloy.

If dust is ingested, immediately drink water to dilute.

Get medical advice/attention - P363

NOTE TO PHYSICIANS: There is no specific antidote to the active ingredients in this product; use

symptomatic treatment.

Other Hazards

OSHA HSC 2112 Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this

product is considered hazardous.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Exposure to dust or fume may aggravate an existing dermatitis, asthma, emphysema, or other respiratory disease.

Canada According to WHMIS

Classification of the substance or mixture

WHMIS This product is considered to be a manufactured article and therefore not subject to WHMIS

requirements.

Other Information NFPA Not rated

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

CAS Number	Components	% By Weight	EINECS/ELINCS	EINECS/ELINCS EU Classi	
			#	Symbol	R-Phrase
7440-50-8	Copper	59 - 96	231-159-6	None	None
7440-66-6	Zinc	4 - 41	231-096-4	None	None
7439-92-1	Lead	0.03 - 0.3	231-104-6	None	None

OSHA REGULATORY STATUS: In solid form, not hazardous. Dust or fume: carcinogen, irritant, lung, blood, kidney, reproductive and developmental toxin, neurotoxin, sensitizer.

In solid form, this material is not hazardous. Dust and fumes are hazardous materials.

#### **SECTION 4: FIRST AID MEASURES**

EYE CONTACT : Immediately flush out fume and dust particles with large amounts of water for

at least 15 minutes, occasionally lifting the upper and lower eyelids. If eye

irritation develops, call a physician at once.

SKIN CONTACT : If exposed to dust or fume, wash skin with plenty of water. Remove

contaminated clothing and shoes and launder befor reuse. If skin irritation or

rash develops and persists or recurs, get medical attention.

<u>INHALATION</u>: If symptoms of lung irritaion occur (coughing, wheezing or breathing difficulty)

remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial respiration. Keep affected person warm and at rest. Get

INGESTION : Not a likely rout of exposure for finished metal alloy. If dust is ingested,

immediately drink water to dilute. Consult a physician if symptoms develop.

NOTE TO PHYSICIANS : There is no specific antidote to the active ingredients in this product; use

symptomatic treatment.

## **SECTION 5: FIRE FIGHTING MEASURES**

PROPERTY	VALUE	PROPERTY	VALUE
Explosive	No	Flammable	No
Combustible	No	Pyrophoric	No
Flash Point (°C):	Not Applicable	Burning Rate of Material	Not Applicable
Lower Explosive Limit:	Not Applicable	Auto Ignition Temp:	Not Applicable
Upper Explosive Limit:	Not Applicable	Flammability Classification: (Defined by 29 CFR 1910.1200)	Not Applicable

<u>UNUSUAL FIRE AND EXPLOSION HAZARDS:</u>
<u>EXTINGUISHING MEDIA:</u>

Dust may cause an ignitable and/or an explosive atmosphere. For localized powder fires, smother with dry sand, dry dolomite, sodium chloride or soda ash. Use fire-extinguishing media

appropriate to fight surrounding fire.

SPECIAL FIREFIGHTING PROCEDURES:

None required

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

## FOR ALL TRANSPORTATION ACCIDENTS, CALL (618)258-5167

In dust form, this product may be an explosion hazard. Remove all sources of ignition. Dust of fume may be suppressed by the use of a local exhaust system. Dispose of per guidelines under Section 13, WASTE DISPOSAL.

## **SECTION 7: HANDLING AND STORAGE**

HANDLING:	Avoid dispersion of dust in air
STORAGE:	No special requirements
Shelf Life Limitation:	None known
Incompatible Materials for Packaging:	None known
Incompatible Materials for Storage or Transport:	None known
OTHER PRECAUTIONS:	Do not shake clothing, rags or other items to remove dust. Dust should be removed by washing or HEPA vacuuming.

#### **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

CAS#	CHEMICAL NAME	ACGIH TLV	OSHA PEL	INTERNATIONAL OELS
7440-50-8	Copper	0.2 mg/m³ (fume), 1 mg/m³ (dust and mists)	0.1 mg/m³ (fume) 1 mg/m³ (dusts and mists)	Austria, Belgium, Canada: 0.2 mg/m³ (fumes), 1 mg/m³ (dusts) Denmark: 1.0 mg/m³ (dust and powder) Germany (MAK): 0.1 mg/m³ (fume), 1 mg/m³ (dusts and mists)
7440-66-6	Zinc	None established	None established	None established
7439-92-1	Lead	0.05 mg/m³	0.05 mg/m³	Austria, Denmark, Germany, Sweden, Switzerland: 0.1 mg/m³

If this product is heated and fumes are generated, zinc oxide fumes could be formed. The ACGIH TLV and OSHA PEL for zinc oxide fume is 5 mg/m³.

<u>ENGINEERING CONTROLS:</u> : Local exhaust ventilation is recommended if signficant dusting occurs or

fumes are generated, Otherwise, use general exhaust ventilation.

EYE/FACE PROTECTION: : Use safety glasses.

SKIN PROTECTION: : Wear impervious (cut-resistant) gloves and other protective clothing

aprons. coveralls) as appropriate to prevent skin contact when using this product. If generating a dust, wast thoroughly after handling, especially

before eating, drinking, or smoking.

RESPIRATORY PROTECTION: :Respiratory protection not normally needed. If dusting occurs or fumes

are generated above the PEL/TLV, use a NIOSH-approved half-face or full-face respirator equipped with High Efficiency Particulate (HEPA) filter

cartridges.

GENERAL HYGIENE CONSIDERATIONS : Do not east, drink, or smoke while using this product in dust form.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

PROPERTY	VALUE	PROPERTY	VALUE
Appearance:	Red/gold metallic	Vapor Density (air=1)	Not applicable
Odor:	None	Boiling Point (°F)	No data
Molecular Weight:	Not applicable-Mixture Solid	Melting point:	L:930 - 1065°C (1710-1950°F) S:905-1050°C (1650-1920°F)
Physical State:	Solid	Specific gravity (g/cc)	8.66
pH:	Not applicable	Bulk Density:	8.66 g/cc
Vapor Pressure (mm Hg).	Not applicable	Viscosity (cps):	Not applicable
Vapor Density.	Not applicable	Decomposition:	Not applicable
Solubility in Water (20° C)	Negligible	Evaporation Rate:	Not applicable
Volatile, Percent by volume	Not applicable	Octanol/water partition coefficient:	Not applicable

# **SECTION 10: STABILITY AND REACTIVITY**

STABILITY:	Stable under normal temperatures an pressure
CONDITIONS TO AVOID:	Not affected by mechanical impact or shock by elecrical discharge.
MATERIALS TO AVOID:	Acetylene, chlorine
HAZARDOUS DECOMPOSITION PRODUCTS:	When heated to decompostion, may produce metal oxides and fumes. Inhalatioin of high concentrations of metal fumes may cause a condition known as "metal fume fever" which is characterized by flue-like symptoms.
HAZARDOUS POLYMERIZATION	Will not occur.

## SECTION 11: TOXICOLOGICAL INFORMATION

<u>POTENTIAL EXPOSURE ROUTES:</u> For dust: ingestion, inhalation, and eye contact. For fume: inhalation and eye contact. The finished alloy metal is not hazardous.

## **ACUTE ANIMAL TOXICITY DATA:**

	For Product: (dust or fume):	For Components			
		Copper	Lead	Zinc	
Oral LD50	Believed to be moderately toxic.	3.5 mg/kg (mouse, intraperitoneal)	No data	No data	
Dermal LD50	Believed to be >2 g/kg	375 mg/kg (rabbit, subcutaneous)	No data	No data	
Inhalation LD50	Believed to be slightly to moderately toxic.	No data	No data	No data	
Irritation	Believed to be an eye and respiratory irritant.	Respiratory irritant	Not irritating	Eye irritant	

SUBCHRONIC/CHRONIC TOXICITY

:No information for product. Lead has caused blood, kidney and nervous

system damage in laboratory animals.

CARCINOGENICITY

:This product is not known or reported to be carcinogenic. The International Agency for Research on Cancer (IARC) lists lead as possibly carcinogenic

to humans, group 2B.

**MUTAGENICITY** 

: This product is not known or reported to be mutagenic. Lead has been

shown to be mutagenic in several in vitro assays.

REPRODUCTIVE, TERATOGENICITY, OR DEVELOPMENTAL EFFECTS

:This product is not known or reported to cause reproductive or developmental effects. Lead has been shown to affect fetal development including birth defects and reduce male reproductive function in laboratory

animals.

**NEUROLOGICAL EFFECTS** 

: this product is not known or reported to cause neurological effects. Lead has caused peripheral na central nervous system damage and behavioral

effects in laboratory animals.

**INTERACTIONS WITH OTHER** CHEMICALS WHICH ENHANCE TOXICITY

: None known or reported.

## **SECTION 12: ECOLOGICAL INFORMATION**

ECOTOXICITY: No data is available on this product. Individual constituents are as follows:

Copper :The toxicity of copper to aquatic organisms varies significantly not only with

the species, but also with the physical and chemical characteristics of the water, such as its temperature, hardness, turbidity and carbon dioxide content. Copper concentrations varying from 0.1 to 1.0 mg/l have been found by various investigators to be not toxic for most fish. However, concentrations of 0.015 to 3.0 mg/l have been reported as toxic, particularly in soft water to many kinds of

fish, crustaceans, mollusks, insects and plankton.

: LC50(48 hrs.) to bluegill (Lepomis macrochirus) is reported to be 2-5 mg/l.

Lead is toxic to waterfowl.

:Dissolved lead may migrate through soil. MOBILITY

:Lead may persist and accumulate in the environment. PERSISTANCE/DEGRADABILITY

:No Data **BIOACCUMULATION** 

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

If this product becomes a waste, it DOES NOT meet the criteria of a hazardous waste as defined under 50 CFR 261, in that it does not exhibit the characteristics of hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D. Care must be taken to prevent environmental contamination from the use of this material. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and non-hazarous wastes. This product may be a candidate for metal reclamation.

## SECTION 14: TRANSPORTATION INFORMATION

	U.S. DOT	RID/ADR	IMDG	IATA	IMO	Canada TDG
PROPER SHIPPING NAME:						
HAZARD CLASS:						
UN NO:						
PACKING GROUP:						
LABEL:						
REPORTABLE QUANTITY:						

#### **SECTION 15: REGULATORY INFORMATION**

#### **US FEDERAL**

TSCA:	The components of this product are listed on the Toxic Substance Control Act inventory.					
CERCLA:	Zinc, R.Q. = 1000 lbs.; Copper, R.Q.= 5000 lbs.; Lead, R.Q. = 10 lbs. No reporting is required if diameter of the pieces of metal is equal to or exceeds 100 micrometers (0.004 in.).					
SARA313:	Copper, Zinc (fume or dus	st), Lead				
SARA313 HAZARD CLASS:	Health:     Acute - Yes     Fire:     Reactivity:     Release of Pressure:       For dust or fume only     Chronic - Yes     None     None					
SARA 302 EHS LIST:	None of the components of this product are listed.					

<sup>\*</sup>RQ=Reportable Quantity

## STATE RIGHT-TO-KNOW STATUS

Component	*CA Prop. 65	New Jersey	Pennsylvania	Massachusetts	Michigan
Copper	Not listed	X	Х	х	Х
Zinc	Not listed	Х	Not listed	X	Х
Lead	Х	X	X	Х	Х

<sup>\*&</sup>quot;WARNING: This product contains detectable amounts of a chemical(s) known to the State of California to cause cancer and/or birth defects or other reproductive harm."

#### **EUROPEAN REGULATIONS**

Because this may material contin lead at>0.2%, this material is calssified as Xn, Harmful. However, this material in its massive solid form is not required to be labeld under EC regulations. German WGK Classification: Unknown

#### **CANADIAN REGULATIONS**

DSL LIST :The components of this product are on the DSL or are exempt from reporting under the

New Substances Notification Regulations.

IDL :Copper, Lead

WHMIS : This product is considered to be a manufactured article and therefore not subject to

WHMIS requirements.

## **SECTION 16: OTHER INFORMATION**

NOTICE: THE INFORMATION IN THIS SDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. OLIN BRASS BELIEVES THIS INFORMATION TO BE RELIABLE AND CURRENT AS OF THE DATE OF PUBLICATION, BUT MAKES NO WARRANTY THAT IT IS.