

**Date:** 4/22/2015 **Version:** 1.0



NFPA: H= 1/F= 1/R= 0/S = NA

HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARD	0
PPE	Ε

# **SECTION 1- CHEMICAL PRODUCT AND COMPANY**

MSDS Name: BRONZE Powder

Company Identification: EnvironMolds, LLC

18 Bank Street / Suite 1 Summit, NJ 07901 Tel: 908-273-5600

For Chemical Emergency (Spill, Leak, Fire Exposure or Accident), Call 1-866-278-6653

(Mon-Sat. \*:00AM-7:00PM EST)

Outside of the USA, Call 001-908-273-5600

# **SECTION 2- COMPOSITION, INFORMATION ON INGREDIENTS**

Chemical Name:	Weight %	CAS#	EINECS #
Copper	80-89	7440-50-8	231-159-6
Tin	10-20	7440-31-5	231-141-8
Phosphorus	<1	7723-14-0	231-768-7

# **SECTION 3-HAZARD(S) INDENTIFICATION**

# **Hazard Symbols:**



Χi

**Risk Phrases**: 36/37/38

**General Information** 

Irritating to eyes, respiratory system and skin.

**Potential Health Effects** 

**Eye:** Causes eye irritation

**Skin:** Causes skin irritation. May be harmful if absorbed through the skin



Date: 4/22/2015 Version: 1.0

Ingestion: May cause irritation of the digestive tract. May be harmful if swallowed.

**Chronic:** See Section 11

### **SECTION 4-FIRST AID MEASURES**

Inhalation: Remove from exposure.

**Skin contact:** Wash affected skin with soap and water. Consult a physician. **Eye contact:** Flush eyes with water at least 15 minutes. Consult a physician

**Ingestion:** Consult a physician immediately.

## **SECTION 5-FIREFIGHTING MEASURES**

Flash Point: NA

Ignition Temperature: Cloud= 630°C Layer: 430°C Minimum Explosive Concentration: NA

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. May burn if involved in a prolonged fire. Weakly flammable solid. Will not burn under ordinary temperatures and pressures.

Extinguishing Media: Class D extinguisher, dry sand or other inert extinguishing material.

**Special fire fighting procedures:** Gently cover the burning mass with sand or inert material and allow to cool. **Unusual fire & explosion hazards:** May be flammable and explosive when in the dust cloud, depending on the concentration of the powder in a given area and the particle size of the powder. Copper powder with a particle size range of less than 74 microns is classified as weakly explosive by the U.S. Bureau of Mines, Report RI-6516. When present as a dust cloud will not explode readily in air and is not easily ignited by sparks.

# **SECTION 6-ACCIDENTAL RELEASE MEASURES**

**Spill & leak procedures:** Wear protective clothing, goggles and a NIOSH approved respirator. Sprinkle moderately with damp sand and collect for disposal, avoiding dust clouds as much as possible.

**Waste disposal method**: Put in a closed container for disposal. (Disposer must comply with Federal, state or local waste disposal laws)

**Handling and storage methods:** Store in a cool, dry place, avoiding contact with heat and acids. Avoid creating dust clouds.

# **SECTION 7-HANDLING & STORAGE**

Handling and storage methods: Store in a cool, dry place, avoiding contact with heat and acids. Avoid creating dust clouds.

## **SECTION 8-EXPOSURE, CONROLS & PROTECTION**

Ventilation requirements: Local exhaust, minimum face velocity of 60 f.p.m.

**Respiratory protection:** (Use NIOSH/MSHA approved respirators) Use supplied air respiratory protection in confined or enclosed spaces if needed.

Protective clothing: Use chemical resistant gloves and apron to avoid prolonged or repeated skin contact.

Additional protective measures: Goggles. Wash after use and before eating/drinking



**Date:** 4/22/2015 **Version:** 1.0

**Exposure** 

Limits: Copper:

United Kingdom,

WEL - TWA: 0.2 mg/m3 TWA (fume); 1 mg/m3 TWA (dust and mist) United Kingdom, WEL -

STEL: 0.6 mg/m3 STEL (fume); 2 mg/m3 STEL (dust and mist)

United States OSHA: 0.1 mg/m3 TWA (fume); 1 mg/m3 TWA (dusts and mists)

Belgium - TWA: 0.2 mg/m3 VLE (fume); 1 mg/m3 VLE (dust and mist)

France - VME: 0.2 mg/m3 VME (fume); 1 mg/m3 VME (dust, as Cu) France - VLE: 2 mg/m3 VLE

(dust, as Cu)

Germany: 1 mg/m3 TWA (inhalable fraction); 0.1 mg/m3 TWA (respirable fraction, smoke)

Malaysia: 0.2 mg/m3 TWA (fume, as Cu); 1 mg/m3 TWA (dust and mist, as Cu)

Netherlands: 0.2 mg/m3 MAC (smoke); 1 mg/m3 MAC (dust)

Russia: 0.5 mg/m3 TWA (aerosol)

Spain: 0.2 mg/m3 VLA-ED (fume); 1 mg/m3 VLA-ED (dust and mist, as Cu)

USA:		COPPER	TIN	PHOSPHORUS
	OSHA PEL, mg/m <sup>3</sup>	1.0 (dusts)/0.1 (fumes)	2.0	0.1
	NIOSH PEL, mg/m³	1.0/0.1 (as fumes)	2.0	0.1
	ACGIH PEL, mg/m³	1.0/0.1 (as fumes)	2.0	0.1

SECTION 9-PHYSICAL & CHEMICAL PROPERTIES			
PHYSICAL PROPERTIES:	COPPER	TIN	PHOSPHORUS
Color/Odor:	Red to reddish-brown	Silvery	Reddish
pH:	NA	NA	NA
Vapor Pressure (Pa @ °C)	0.0505 @ 1085°C	2620 KPa @ 2260°C	100 @256°C
Viscosity:	NA	NA	NA
BP (°C @ 760 mm Hg):	2580	2260	277
Freezing/Melting Point, °C:	1083	950-1025	44
Solubility in Water:	NA	NA	NA
Specific Gravity, g/cc:	8.92	7.31	1.82
MW Formula/MW:	Cu/63.54	Sn/118.69	P/30.97



Date: 4/22/2015 Version: 1.0

## **SECTION 10-STABILITY & REACTIVITY**

Chemical Stability: Stable under normal temperatures and pressures.

Incompatibilities with Other Materials: Strong oxidizing agents, strong acids, bromates, chlorates, iodates.

Hazardous Polymerization: Will not occur

## **SECTION 11-TOXICOLOGICAL INFORMATION**

RTECS: CAS# 7440-50-8: GL5325000, GL7440000, GL7590000

LD50/LC50: RTECS- Not available

Carcinogenicity: Copper- Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65

Other: The toxicological properties have not been fully investigated.

## **SECTION 12-ECOLOGICAL INFORMATION**

Marine Environment: Copper powder is considered a marine pollutant. Do not empty into surface water and

drains.

## **SECTION 13-DISPOSAL CONSIDERATIONS**

**Disposal:** Dispose of in a manner consistent with federal, state, and local regulations.

## **SECTION 14-TRANSPORTATION INFORMATION**

	DOT	IATA	IMDG	RID/ADR- 4 -
ShippingName:	Not Regulated	Not Regulated	Not Regulated	Not Regulated
Hazard Class:	Not Regulated	Not Regulated	Not Regulated	Not Regulated
UN Number:	Not Regulated	Not Regulated	Not Regulated	Not Regulated
Packing Group:	Not Regulated	Not Regulated	Not Regulated	Not Regulated

## **SECTION 15-REGULATORY INFORMATION**

### **European/International Regulations:**

European Labeling in Accordance with EC Directives

Hazard Symbols: Xi

Risk Phrases: R 36/37/38 Irritating to eyes, respiratory system and skin

Safety Phrases: S7 Keep container tightly closed.

S26 In case of contact with eyes, rinse immediately with plenty of water and

seek medical advice.

Take precautionary measures against static discharges.

S37/39 Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection): CAS# 7440-50-8: 0

Canada DSL: CAS# 7440-50-8: Listed on Canada's DSL

WHIMIS Classification: D2A, D2B

Mexican Dangerous Statement: This product is dangerous, according Mexican Regulations



**Date:** 4/22/2015 **Version:** 1.0

TSCA: CAS# 7440-50-8 Listed on TSCA Inventory

TSCA Section 4(a) Not regulated

TSCA Section 5(a)(2) (SNURS, 40 CFR721 Subpart E) ) Not regulated

TSCA Section 5(e) Not regulated

TSCA Section 12(b) (40 CFR 707, Subpart D) Not regulated

CERCLA (40 CFR 302.4): Copper, RQ= 5,000 lbs.

Tin, RQ= NA

SARA Title III (40 CFR370) Not regulated

SARA Title III Section 313 Reporting Threshold for manufacturing & processing/otherwise used

Copper= 25,000 lbs./10,000 lbs.

# **SECTION 16-OTHER INFORMATION**

MSDS CREATION DATE: April 22, 2015

The information provided in this SDS is believed to be accurate and represents the best information currently available to us. However, EnvironMolds LLC, makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has advised of the possibility of such damages.