

# SAFETY DATA SHEET

#### SECTION 1: INDENTIFY OF THE SUBSTANCE / MANUFACTURING INFORMATION

Product Name : Copper Ball & Slug

Manufacturer : LUVATA MALAYSIA SDN BHD

Address : Plo 573, Jalan Keluli 10, Kawasan Perindustrian Pasir Gudang, 81700 Pasir

Gudang, Johor, Malaysia.

Telephone : +6072526688

Fax : +6072524388

## **SECTION 2: COMPOSITION / INFORMATION OF INGREDIENTS**

 Copper trade name / CAS No
 UNS No.
 Copper %

 Cu-OF / 7440-50-8
 C10200
 99.95% Min

 Cu-DHP / 7440-50-8
 C12220
 99.90% Min

## **SECTION 3: HAZARDS INDENTIFICATION**





Signal Word: Health Hazard

Physical / Chemical

Hazards

Not classified as dangerous

Environmental Hazards : Not classified as dangerous, can be 100% recyclable.

Human Hazards : Copper products in the natural state do not present an inhalation ingestion or

contact hazard.

However, operations such as melting, welding, sawing, brazing and grinding

may result in the following effects in the case of overexposure.



Route of Entry: Skin : No
Route of Entry: Ingestion : No
Route of Entry: Inhalation : Yes

Health Hazards - Acute and Chronic INHALE: IF HEATED (>1100 ° C) MAY CAUSE

: "METAL FUME FEVER"(FLU-LIKE SYMPTOMS)

Carcinogenetic: NTP : No
Carcinogenetic: IARC : No
Carcinogenetic: OSHA : No
Explanation of Carcinogenetic : None

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

Inhalation : In case of excessive exposure, remove to fresh air, administer oxygen and seek

physician assistance.

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

Extinguishing Media : Carbon Dioxide, Dry Chemical

Special Fire Fighting

Procedures

Self-contained breathing apparatus with a full face-piece operated in the

positive pressure démodé mode with appropriate turn-out gear and

chemical resistant

# SECTION 6: ACCIDENT RELEASE MEASURES

Copper Slug/Nugget in the natural state do not cause any accidents.

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

Precautions to be taken in handling and storage

Good housekeeping must be practiced during storage, transfer, handling and use to avoid excessive dust accumulation.

#### SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

Copper Slug/Nugget in the natural state do not present an inhalation ingestion or contact hazard.

However, operations such as melting, welding, sawing, brazing and grinding may result in the following effects in the case of overexposure



**Dust Mask** 







Personal Protective

Equipment

: Respiratory Protection

Eye Protection Ventilation Protective Gloves

Depending on use, in special cases consult Other Protective Equipment

industrial safety experts for appropriate selection.

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

Physical Properties	US Customary	Metric
Melting Point - Liquidus	1981 F	1083 C
Melting Point - Solidus	1981 F	1083 C
Density	0.323 lb/in <sup>3</sup> at 68 F	8.94 gm/cm <sup>3</sup> @ 20 C
Specific Gravity	8.94	8.94
Electrical Resistivity	10.3 ohms-cmil/ft @ 68 F	1.71 microhm-cm @ 20 C
Electrical Conductivity	101 %IACS @ 68 F	0.591 MegaSiemens/cm @ 20 C
Thermal Conductivity	226.0 Btu $\cdot$ ft/(hr $\cdot$ ft2 $\cdot$ °F)at 68F	391.1 W/m · °K at 20 C
Coefficient of Thermal Expansion	9.4 ·10 <sup>-6</sup> per °F (68-212 F)	16.9 ·10 <sup>-6</sup> per °C (20-100 C)
Coefficient of Thermal Expansion	9.6 ·10 <sup>-6</sup> per °F (68-392 F)	17.3 ·10 <sup>-6</sup> per °C (20-200 C)
Coefficient of Thermal Expansion	9.8 ·10 <sup>-6</sup> per °F (68-572 F)	17.6 ·10 <sup>-6</sup> per °C (20-300 C)
Specific Heat Capacity	0.092 Btu/lb/°F at 68 F	393.5 J/kg · °K at 293 K
Modulas of Elasticity in Tension	17000 ksi	117000 MPa
Modulus of Rigidity	6400 ksi	44130 MPa

# **SECTION 10: STABILITY AND REACTIVITY**

Stability : Yes Stability Conditions to Avoid : None

Materials to Avoid : ACETYLENES, SULFUR COMPOUNDS

Hazardous Polymerization : No

Polymerization Conditions to Avoid : Will Not Occur

# **SECTION 11: TOXICOLOGICAL INFORMATION**

Not classified as hazards

## **SECTION 12: ECOLOGICAL INFORMATION**

Environmental Hazards : Not classified as dangerous, can be 100% recyclable.

## **SECTION 13: DISPOSAL CONSIDERAION**

Environmental Hazards : Not classified as dangerous, can be 100% recyclable.



# **SECTION 14: TRANSPORT INFORMATION**

No information.

## **SECTION 15: REGULATORY INFORMATION**

No information.

## **SECTION 16: OTHER INFORMATION**

Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of the knowledge and belief of LUVATA MALAYSIA SDN BHD, but is not guaranteed to be so. The company makes no representations or warranties, express or implied. Customers are encouraged to conduct their own tests.

For further information contact: LUVATA MALAYSIA SDN BHD

Date: 28/02/2017