



Meets the Requirements of OSHA Standard 29 CFR 1910.1200 Hazard Communication and EPA Supplier Notification Requirements under Section 313 of the Emergency Planning and Community Right-to-Know Act.

## SAFETY DATA SHEET (SDS)

SDS ISCO-104 Rev 1

RENEWAL DATE 01/22

**COPPER INGOT  
COPPER CHOPS  
COPPER INDUCTOMELT® pellet  
COPPER SOLIDS**

### SECTION 1—PRODUCT IDENTIFICATION & COMPANY INFORMATION

PRODUCT NAME

**COPPER INGOT  
COPPER CHOPS  
COPPER INDUCTOMELT® pellet  
COPPER SOLIDS**

MANUFACTURER'S NAME

I. Schumann Co LLC

STREET ADDRESS

22500 Alexander Road

EMERGENCY TELEPHONE NO.

440-439-2300

MAILING ADDRESS

22500 Alexander Road

TELEPHONE NO.

440-439-2300

CITY, STATE, ZIP CODE, COUNTRY

Bedford, Ohio 44146 USA

FAX NO.

440-439-0317

E-MAIL ADDRESS/WEBSITE

www.ischumann.com

RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE

Solid metal shapes; no restrictions

### SECTION 2—HAZARD IDENTIFICATION

#### CLASSIFICATION

The products are metallic articles that do not present hazards in their original form.

#### HAZARD STATEMENT:



#### WARNING

Fumes from hot processes may contain other compounds with different exposure limits. Dust or fumes generated by melting, machining, grinding, welding or thermal cutting of the product may produce airborne contaminants. Consult Sections 3 & 8 for further information.

#### PRECAUTIONARY STATEMENT:

Do not breathe fumes

Wear protective gloves

Do not eat, drink, or smoke when using this product

### SECTION 3—COMPOSITION/INFORMATION ON INGREDIENTS

| CHEMICAL NAME/COMMON NAME/SYNONYM | Wt % | CAS NUMBER |
|-----------------------------------|------|------------|
| Copper (Cu) Metal                 | >99  | 7440-50-8  |

### SECTION 4—FIRST AID MEASURES

|               |   |
|---------------|---|
| EYE CONTACT:  | Flush eyes with lukewarm water, including under upper and lower eyelids, for at least 15 minutes. Seek medical attention if symptoms persist.     |
| SKIN CONTACT: | Remove contaminated clothing, brush material off skin, wash affected area with soap and water. Seek medical attention if symptoms persist.        |
| INGESTION:    | Rinse mouth with water. Do not induce vomiting. Seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person. |
| INHALATION:   | Remove to fresh air, keep warm and quiet, give oxygen if breathing is difficult. Seek medical attention.  |

### SECTION 5—FIREFIGHTING MEASURES

|                                     |   |
|-------------------------------------|---|
| FLAMMABLE PROPERTIES:               | The product in its present form is noncombustible.  |
| EXTINGUISHING MEDIA:                | Use fire extinguishing materials suitable for the surrounding environment. Do not use halogenated extinguishers on small chips or fines.  |
| UNUSUAL FIRE AND EXPLOSION HAZARDS: | May emit copper oxide fumes under fire conditions. Do not use water in fighting fires around molten metal. If the alloys in their molten form come in contact with water, a severe steam reaction will cause the molten metal to be sprayed about the area. |
| PROTECTION OF FIREFIGHTERS:         | Full face, self-contained breathing apparatus and full protective clothing when necessary.  |

### SECTION 6—ACCIDENTAL RELEASE MEASURES

|  |   |
|--|---|
| METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: | Sweep or scoop up. Place in properly labeled closed containers. Scrap can be collected for recycling. |
| ENVIRONMENTAL PRECAUTIONS:                             | Do not allow to enter drains or to be released to the environment.                                    |

### SECTION 7—HANDLING & STORAGE

|                         |   |
|-------------------------|---|
| RECOMMENDED STORAGE     | No special requirements                         |
| PROCEDURES FOR HANDLING | Proper hand and foot protection is recommended. |

### SECTION 8—EXPOSURE CONTROLS/PERSONAL PROTECTION

|                      |   |
|----------------------|---|
| ENGINEERING CONTROLS | None Required prior to melting. There are no health hazards from the product in solid form. |
|----------------------|---|

**SUPPLEMENTAL INFORMATION**

Fumes from hot processes may contain other compounds with different exposure limits than those listed herein. Dust or fumes generated by machining, grinding, welding or thermal cutting of the INGOT may produce airborne contaminants. Exposure limits for the most common contaminants are offered as reference. Please consult a competent person for guidance on exposure assessment and controls.

| SUBSTANCE            | ACGIH TLV<br>mg/m <sup>3</sup> | OSHA PEL<br>mg/m <sup>3</sup> |
|----------------------|--------------------------------|-------------------------------|
| Copper Compounds     |                                |                               |
| Fume (Cu)            | 0.2                            | 0.1                           |
| Dusts and Mists (Cu) | 1                              | 1                             |

**TERMS**

All exposure limits referenced herein are 8 hour time weighted averages (TWA) unless otherwise noted.

N/E = None Established

C = Ceiling

I = Inhalable fraction

R = Respirable fraction

STEL = Short Term Exposure Limit

TLV = Threshold Limit Value/American Conference of Governmental Industrial Hygienists (ACGIH)

PEL = Permissible Exposure Limit / OSHA

AL = Action Level / OSHA

mg/m<sup>3</sup> = milligrams per cubic meter

µg/m<sup>3</sup> = micrograms per cubic meter

**PERSONAL PROTECTION**

Proper hand and foot protection is recommended.

**SECTION 9—PHYSICAL & CHEMICAL PROPERTIES****APPEARANCE /PHYSICAL STATE**

Reddish solids

**ODOR/ODOR THRESHOLD**

None

**VAPOR DENSITY**

Not applicable

**MELTING POINT/FREEZING POINT**

Approximately 1084°C (1984°F) for copper

**SPECIFIC GRAVITY (relative density)**

8.92 g/cm<sup>3</sup> (water = 1)

**BOILING POINT**

2562°C (4644°F)

**VAPOR PRESSURE**

Not applicable

**FLASH POINT**

Not applicable for solid product

**EVAPORATION RATE**

Not applicable

**FLAMMABILITY**

Product not flammable in solid form

**SOLUBILITY IN WATER**

Insoluble

**UPPER AND LOWER FLAMMABILITY LIMITS**

Not applicable for I product in solid form

**pH**

Not applicable

**AUTO IGNITION TEMPERATURE**

Not applicable

**VISCOSITY**

Not applicable

**DECOMPOSITION TEMPERATURE**

Not applicable

**PARTITION COEFFICIENT**

Not applicable

## SECTION 10—STABILITY & REACTIVITY

CHEMICAL STABILITY: Product is stable in solid form

CONDITIONS TO AVOID: Avoid creating or accumulating fines or dusts.

REACTIVITY: Not reactive

INCOMPATIBLE MATERIALS:

Acids, halogens, alkalis, water/moisture.

HAZARDOUS DECOMPOSITION PRODUCTS  
None

HAZARDOUS POLYMERIZATION  
Not applicable

## SECTION 11—TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

EYE CONTACT: None

SKIN: None

INGESTION: None

INHALATION: None

CARCINOGENICITY:

NTP: Not identified as carcinogenic IARC: Not identified as carcinogenic

### TERMS

OSHA—Occupational Safety & Health Administration

Y = Listed as a Human Carcinogen

NTP—National Toxicology Program

K = Known to be a Human Carcinogen

R = Reasonably Anticipated to be a Human Carcinogen (RAHC)

IARC—International Agency for Research on Cancer

1 = Carcinogenic to Humans

2A = Probably Carcinogenic to Humans

2B = Possibly Carcinogenic to Humans

3 = Unclassifiable as to Carcinogenicity in Humans

4 = Probably not Carcinogenic to Humans

Other

NL = Not Listed

## SECTION 12— ECOLOGICAL INFORMATION

ECOTOXICITY

No data

PERSISTENCE AND DEGRADABILITY

No data

BIOACCUMULATION POTENTIAL

No data

MOBILITY IN SOIL

No data

OTHER ADVERSE EFFECTS

No data

## SECTION 13—DISPOSAL CONSIDERATIONS

Recover or recycle if possible. Dispose of according to federal, state and local regulations. Dust collected from machining, welding, etc. may be classified as a hazardous waste. Consult federal, state and local regulations.

**SECTION 14—TRANSPORT INFORMATION**

|   |   |
|---|---|
| US DEPARTMENT OF TRANSPORTATION (DOT)-HMR (Hazardous Materials Registration)<br>Not Regulated | CANADIAN TRANSPORTATION OF DANGEROUS GOODS (TDG)<br>Not regulated |
| UN SHIPPING NAME<br>Not regulated   | UN NUMBER<br>Not regulated  |
| TRANSPORT HAZARD CLASS<br>Not regulated   | PACKING GROUP<br>Not regulated                                    |
| ENVIRONMENTAL HAZARDS<br>None   | LABEL(S) REQUIRED?<br>No  |
| TRANSPORT IN BULK<br>Not applicable   | SPECIAL SHIPPING INFORMATION<br>Not applicable                    |

**SECTION 15—REGULATORY INFORMATION**

|  |
|--|
| <b>US-EPA (Toxic Substances Control Act-TSCA)</b><br>All components of these products are on the TSCA inventory list or are excluded from listing.   |
| <b>US-EPA (SARA Title III)</b><br>Releases to the environment of Copper (fume or dust) may be subject to reporting under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.         |
| <b>CANADA-WHMIS (Workplace Hazardous Materials Information System)</b><br>This SDS has been prepared according to the hazard criteria of the Controlled Product Regulations (CPR) and the SDS contains the information required by the CPR |
| <b>RoHS (Restriction of Certain Hazardous Substances) Compliance</b><br>Products comply with RoHS  |

**SECTION 16—OTHER INFORMATION**

|  |                      |
|--|----------------------|
| <b>SDS ISSUED BY</b><br>EHS Department<br>of I. Schumann Co LLC, Bedford Ohio  | <b>DATE</b><br>10/15 |
| <b>NOTE</b><br>This data and label information is offered in good faith as typical values and not as a product specification. No warranty either expressed or implied is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review the recommendations in specific context of the intended use and determine if they are appropriate. |                      |