



## MATERIAL SAFETY DATA SHEET

Celestra, 76, Huancun Road, Zhongcun Street, Panyu Dist, Guangzhou

**Celestra CATALOG NUMBER: LUG**  
(SEE ADDENDUM)

REVISION: 00  
DATA PREPARED: 23 Aug 2025

PRODUCT DESCRIPTION: COPPER LUG

DOCUMENT NUMBER: **MSDS-0062**  
(FORMERLY MSDS0062)

### SECTION 1 PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

**PRODUCT NAME:** LUG

**GENERAL USE:** CONDUCTOR TERMINATION

**PRODUCT DESCRIPTION:** COPPER LUG

**GENERIC INGREDIENTS:** COPPER W/TIN

**24HR EMERGENCY TELEPHONE NUMBERS: CHEMTREC: (703) 527-3887 / 800-424-9300**

FOR PRODUCT INFORMATION: Celestra: +86.20.3471.7744

### SECTION 2 HAZARDOUS INGREDIENT SECTION

#### OSHA HAZARDOUS INGREDIENTS

| HAZARDOUS COMPONENTS | CAS NO.   | % BY WT     | OSHA PEL            | ACGIH TLV           | OTHER LIMITS OF EXPOSURE  |
|----------------------|-----------|-------------|---------------------|---------------------|---------------------------|
| COPPER               | 7440-50-8 | 96.44~98.61 | 1 mg/M <sup>3</sup> | 1 mg/M <sup>3</sup> | STEL: 2 mg/M <sup>3</sup> |

### SECTION 3 HEALTH INFORMATION & PROTECTION

|                           |                    |    |                         |    |                        |    |
|---------------------------|--------------------|----|-------------------------|----|------------------------|----|
| <b>CARCINOGENICITY:</b>   | <b>NTP?</b>        | NO | <b>IARC MONOGRAPHS?</b> | NO | <b>OSHA REGULATED?</b> | NO |
| <b>ROUTE(S) OF ENTRY:</b> | <b>INHALATION?</b> | NO | <b>SKIN?</b>            | NO | <b>INGESTION?</b>      | NO |

**HEALTH HAZARDS(ACUTE AND CHRONIC):**

**POTENTIAL HEALTH EFFECTS:**

**EYE CONTACT:** NOT REGULATED.

**SKIN CONTACT:** NOT REGULATED.

**INGESTION:** NOT REGULATED.

**INHALATION:** NOT REGULATED.

**FIRST AID MEASURES:**

**EYE CONTACT:** NOT REGULATED.

**SKIN CONTACT:** NOT REGULATED.

**INGESTION:** NOT REGULATED.



## MATERIAL SAFETY DATA SHEET

Celestra, 76, Huancun Road, Zhongcun Street, Panyu Dist, Guangzhou

**Celestra CATALOG NUMBER: LUG**  
(SEE ADDENDUM)

REVISION: 00  
DATA PREPARED: 23 Aug 2025

PRODUCT DESCRIPTION: COPPER LUG

DOCUMENT NUMBER: **MSDS-0062**  
(FORMERLY MSDS0062)

**INHALATION:** NOT REGULATED.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:**

**WORKPLACE EXPOSURE CONTROLS:**

**PERSONAL PROTECTION:**

RESPIRATORY PROTECTION: NONE NEEDED.

VENTILATION:

HAND PROTECTION: PROTECTIVE GLOVES FOR HYPERSENSITIVE PERSONS.

EYE PROTECTIVE: GLASSES, IF APPLIED TO MOVING PARTS IN MOTION.

BODY PROTECTION: OVERALLS.

WORK/HYGIENIC:

### SECTION 4 FIRE & EXPLOSION HAZARDS

**FLASH POINT:** NOT REGULATED.

**EXPLOSIVE PROPERTIES:** NOT REGULATED.

**FLAMMABLE LIMITS:** NOT FLAMMABLE AT AMBIENT TEMPERATURE

**GENERAL HAZARD:**

**FIRE FIGHTING:** FOAM, DRY POWDER, CARBON, DIOXIDE, SAND, EARTH AND WATER MIST.

### SECTION 5 SPILL CONTROL MEASURES

**SPILL RESPONSE:** NOT REGULATED.

**PRODUCT DISPOSAL:** DO NOT INCINERATE. CONTACT WASTE DISPOSAL AUTHORITY FOR ADVICE.

**CONTAINER DISPOSAL:** PAILS WITHOUT LINER SEE "PRODUCT DISPOSAL". PAILS WITH PLASTIC LINER PAIL CAN ONLY BE DISPOSED OF VIA STANDARD WASTE DISPOSAL SERVICES, RECYCLED OR REUSED. LINER - SEE "PRODUCT DISPOSAL".

### SECTION 6 HANDLING & STORAGE



## MATERIAL SAFETY DATA SHEET

Celestra, 76, Huancun Road, Zhongcun Street, Panyu Dist, Guangzhou

**Celestra CATALOG NUMBER: LUG**  
(SEE ADDENDUM)

REVISION: 00  
DATA PREPARED: 23 Aug 2025

PRODUCT DESCRIPTION: COPPER LUG

DOCUMENT NUMBER: **MSDS-0062**  
(FORMERLY MSDS0062)

**GENERAL:** NO SPECIAL HANDLING PRECAUTIONS NECESSARY.

**STORAGE:** DO NOT STORE ATELEVATED TEMPERATURES.

### SECTION 7 TYPICAL PHYSICAL & CHEMICAL PROPERTIES

**APPEARANCE:** GRAINY SEMISOLID PASTE

**COLOR:** COPPER

**DENSITY(g/cm<sup>3</sup>):** 1.66

**ODOR:** SHARP

**pH:** NEUTRAL

**PARTITION COEFFICENT (LOG POW):** N/A

**SOLUBILITY IN WATER:** Nil

**VAPOR PRESSURE, (kPa):** <0.01

**AUTOIGNITION**

**TEMPERATURE °F(°C):** >680(360)

**BOILING POINT °F(°C):** >700(371)

**EVAPORATION RATE,**

**BUTYL ACETATE=1:** <0.01

**MELTING POINT:** N/A

**PERCENT VOLATILE:** NIL

**SPECIFIC GRAVITY (H2O=1):**

**VAPOR DENSITY (AIR=1):** >5

### SECTION 8 REACTIVITY DATA

**GENERAL:**

**CHEMICAL STABILITY:** CHEMICAL STABLE UNDER NORMAL CONDITIONS. NO PHOTOREACTIVE AGENTS.

**INCOMPATIBLE MATERIALS AND CONDITONS TO AVOID:** POWERFUL SOURCES OF IGNITION. STRONG INORGANIC AND ORGANIC ACIDS AND OXIDIZING AGENTS.

**HAZARDOUS DECOMPOSITION PRODUCTS:** BURNING GENERATES SMOKE, AIRBORNE SOOT, HYDROCARBONS AND OXIDES OF CARBON. RESIDUE MAINLY COMPRISED OF SOOT AND METAL OXIDES AND MINERAL CARBIDES.

**HAZARDOUS POLYMERIZATION:**

### SECTION 9 REGULATORY INFORMATION

**DEPARTMENT OF TRANSPORTATION(DOT):** NON-HAZARDOUS



## MATERIAL SAFETY DATA SHEET

Celestra, 76, Huancun Road, Zhongcun Street, Panyu Dist, Guangzhou

Celestra CATALOG NUMBER: LUG

(SEE ADDENDUM)

REVISION: 00

DATA PREPARED: 23 Aug 2025

PRODUCT DESCRIPTION: COPPER LUG

DOCUMENT NUMBER: **MSDS-0062**

(FORMERLY MSDS0062)

### HAZARD CLASS:

UN#:

PG:

ERG:

HAZ LABEL:

I.A.T.A. CLASSIFICATION: NOT REGULATED

### HAZARD CLASS:

UN#:

PG:

ERG:

HAZ LABEL:

### U.S. FEDERAL REGULATIONS

TSCA: ALL COMPONENTS ARE LISTED.

CERCLA: NON-HAZARDOUS

RCRA HAZARD CLASS: NON-HAZARDOUS

### SARA TITLE III INFORMATION

SECTION 302: NONE

SECTION 311/312: NONE

SECTION 313: THIS PRODUCT CONTAINS COPPER

NEW JERSEY RIGHT-TO-KNOW INFORMATION: N/A

CALIFORNIA PROPOSITION 65 INFORMATION: NONE.

### INTERNATIONAL:

WHMIS(CANADA): NOT REGULATED

### SECTION 10 NOTES

TOXICOLOGICAL INFO: LC-50: 1.98G/LT (MYSIDOPSIS BAHU), BASED ON ASSESSMENT FROM RELATED PRODUCTS.

### HAZARD RATING SYSTEMS:

HIMS

NFPA

KEY



| MATERIAL SAFETY DATA SHEET   |  |
|--|--|
| Celestra, 76, Huancun Road, Zhongcun Street, Panyu Dist, Guangzhou |  |
| Celestra CATALOG NUMBER: LUG<br>(SEE ADDENDUM)                     | REVISION: 00<br>DATA PREPARED: 23 Aug 2025               |
| PRODUCT DESCRIPTION: COPPER LUG                                    | DOCUMENT NUMBER: <b>MSDS-0062</b><br>(FORMERLY MSDS0062) |

|              |   |   |            |
|--------------|---|---|------------|
| HEALTH       | 1 | 1 | 4=SEVERE   |
| FLAMMABILITY | 1 | 1 | 3=SERIOUS  |
| FLAMMABILITY | 1 | 1 | 2=MODERATE |
|              |   |   | 1=SLIGHT   |
|              |   |   | 0=MININAL  |

REVISION SUMMARY:

SUPERSEDES ISSUE DATE

ABBREVIATION:

N/E=NOT ESTABLISHED  
N/A=NOT AVAILABLE

THE INFORMATION PRESENTED HEREIN HAS BEEN COMPILED FROM SOURCES CONSIDERED TO BE DEPENDABLE AND ACCURATE TO THE BEST OF CELESTRA KNOWLEDGE. THE INFORMATION RELATES TO THIS SPECIFIC MATERIAL. IT MAY NOT BE VALID FOR THIS MATERIAL IF USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. IT IS THE USERS’S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY AND COMPLETENESS OF THIS INFORMATION FOR HIS OWN PARTICULAR USE.

ADDENDUM

| Catalog Number | Description                              |
|----------------|--|
| AS3176-62      | Copper Two-Hole Lug-90°, Standard Barrel |