Copper Alloy CuCrZr

CuCrZr · C18150

Conductive copper-alloy powder for thermal, electrical, RF, tooling, and high-heat-flux components.

Designations: CuCrZr · CuCr1Zr · UNS C18150

Supply

Item	Value
Particle-size cuts	15–45 µm · 15–53 µm · 45–106 µm
Processes	LPBF
Minimum pack	1 kg (paid samples)
Packaging	Aluminium-foil bag · 1 kg sealed pack · Drum
Documents	Lot-specific COA · Particle-size report · Safety data sheet · Chemistry report
List price	US$51–81/kg, EXW China

Our list price for LPBF cuts (15–45 µm or 15–53 µm), per kg, EXW China, from 1 kg. It is set at 80–90% of the public list prices of mainstream suppliers checked in October 2026. Other particle-size cuts are priced by agreement; packing and freight are quoted separately. Your written quotation from our official corporate email confirms the price, lead time and terms for your quantity, particle size and documents.

Chemical composition, wt.%

Element	Limit
Cu	Balance
Cr	0.50–1.50
Zr	0.05–0.25
Fe	≤0.15
Si	≤0.10
O	≤0.10
N	≤0.05

Typical partner-plant datasheet limits, wt.%. The quoted lot COA governs.

Powder properties · LPBF screening window

Property	Value	Note
D10	≥15 µm	
D50	30–40 µm	
D90	≤60 µm	
Sphericity	≥0.90	Method to be confirmed
Apparent density	≥4.4 g/cm³	
Tap density	≥5.2 g/cm³	
Flow	≤22 s/50 g	Method and conditioning to be confirmed

A CuCrZr screening basis; conductivity, strength, and laser coupling depend on the complete process route.

Typical mechanical properties

Condition	Temperature	Tensile	Yield	Elongation	Note
Heat treated	Room temperature	≥350 MPa	≥250 MPa	≥30%	Electrical conductivity ≥85% IACS

Partner-plant datasheet values for LPBF test bars at room temperature unless stated. Printed-part properties depend on machine, parameters, orientation, and post-processing.

Second-partner LPBF test series: strength-oriented heat treatment

Item	Value
As-built relative density	≥99.9%
As-built electrical conductivity	23.2–24.4% IACS
Tensile / yield / elongation, heat treated, XY, room temperature	586 MPa / 519 MPa / 22.4%
Tensile / yield / elongation, heat treated, Z, room temperature	531 MPa / 504 MPa / 24.7%
Tensile / yield / elongation, heat treated, XY, at 500 °C after a 30 min hold in air	361 MPa / 358 MPa / 14.6%
Electrical conductivity after heat treatment	76% IACS
Thermal conductivity after heat treatment, 25 °C	325–340 W/(m·K)
Zr ranges offered by this partner	0.03–0.3% (standard CuCr1Zr) or 0.3–0.6% (high-Zr version)

Measured by a second partner manufacturer on LPBF specimens (infrared laser) built from its own CuCr1Zr powder. One reported test series, not a lot guarantee. Its heat treatment was chosen for strength, so its conductivity is lower than the datasheet minimum above; state which strength-conductivity balance your part needs.

Typical values, not a lot certificate. The certificate of analysis for the quoted lot governs. Formal quotations and commercial terms are valid only when issued from our official corporate email.

Request a quote: https://metal3dpowder.com/rfq/?product=cucrzr · Grade page: https://metal3dpowder.com/products/cucrzr/
Suzhou Como Precision Materials Co., Ltd. (SZCOMO) · info@szcomo.com · Exporting metal powders since 2016 · Issued 2026-10-26