

CuCr1Zr

Metal Powder for Additive Manufacturing

PRODUCT DESCRIPTION

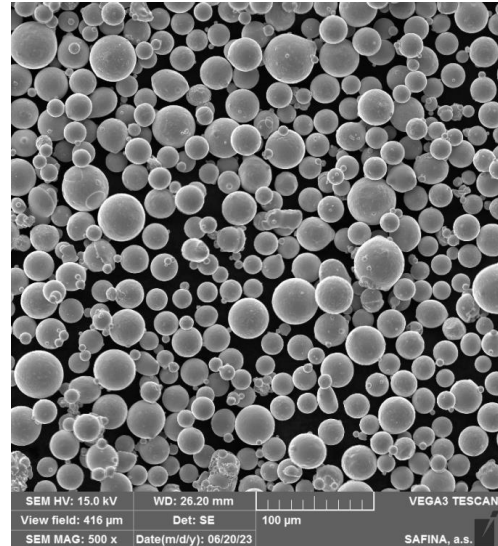
Gas atomized copper powder suitable for precipitation hardening with high strength and thermal conductivity.

KEY FEATURES

Safina produce high quality powders with perfect traceability, repeatability and have great sphericity and flowability.

APPLICATIONS

Recommended for 3D printed parts for high-temperature applications like combustion chambers and nozzles.
Copper alloy printable by 400W IR laser.



TYPICAL PROPERTIES

PHYSICAL DATA:

PSD*	D10 [µm]	D50 [µm]	D90 [µm]
0-15 µm	6	12	18
15-45 µm	19	28	42
10-53 µm	15	32	50
20-63 µm	24	39	63
45-90 µm	54	66	88

CHEMICAL DATA

	Standard grade [wt. %]	Aerospace grade [wt. %]
Cu	bal.	bal.
Cr	0,5	0,93
Zr	0,03	0,08
Fe	≤0,08	≤0,002
Si	≤0,1	≤0,01
Impurities (exl. oxygen)	0,05	0,015
O**	0,02	0,02

OTHER DATA***

Flowability [s/50g]	16,5 s
Apparent density [g/cm ³]	4,7

* Other PSD possible according to customer needs

** Oxygen content depends on PSD (mentioned value is for PSD 10-53 µm suitable for LPBF technology)

*** Displayed values are for PSD 10-53 µm suitable for LPBF technology