

Material Data Sheet C18150

Chromium Zirconium Copper (CuCr1Zr)

C18150 is a highly conductive and high-strength copper alloy.

Application

Additive manufactured C18150 has been used for electrodes, heat exchangers, and regeneratively cooled rocket combustion devices and nozzles.

Chemical Composition (Properties are based on parts experiencing HIP & STQA)

	Cu	Cr	Zr	Other
Wt%	Bal	0.5 - 1.5	0.02 - 0.20	

Properties

Materials Properties	Unit	Value	Notes
Yield Strength .2%	ksi / MPa	36 / 250	With HIP+STQA
Ultimate Tensile	ksi / MPa	55 / 380	With HIP+STQA
Elong	%	> 25	With HIP+STQA
R.A.	%	> 35	With HIP+STQA

This data sheet contains approximate values. These values are influenced by part's geometry, additives, and environmental influences. They were developed based on current experiences and knowledge. Therefore, the above-mentioned properties cannot be claimed legally binding nor can a definite purpose be derived.

