

## IBC Advanced Alloys C18150 Chrome Copper Zirconium Alloy, TL06 Temper

Category : Metal , Nonferrous Metal , Beryllium Alloy , Copper Alloy

### Material Notes:

C18150 Chrome Copper Zirconium is recommended for spot and seam welding cold and hot-rolled steel, stainless steel and low conductivity brass and bronze. C18150 Chrome Copper Zirconium Alloy is typically used in pencil-type & light soldering guns: tips, rod extensions, resistance welding electrodes, welding electrodes, welding wheels, and tips and rod extensions. Information provided by IBC Advanced Alloys.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_IBC-Advanced-Alloys-C18150-Chrome-Copper-Zirconium-Alloy-TL06-Temper.php](http://www.lookpolymers.com/polymer_IBC-Advanced-Alloys-C18150-Chrome-Copper-Zirconium-Alloy-TL06-Temper.php)

Physical Properties	Metric	English	Comments
Density	8.89 g/cc	0.321 lb/in <sup>3</sup>	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell B	78 - 82	78 - 82	Plate and Rounds
Tensile Strength	517 - 586 MPa	75000 - 85000 psi	Plate and Rounds
Tensile Strength, Yield	496 - 565 MPa @Strain 0.200 %	72000 - 82000 psi @Strain 0.200 %	Plate and Rounds
Elongation at Break	16 %	16 %	Plate and Rounds
Modulus of Elasticity	117 GPa	17000 ksi	

Thermal Properties	Metric	English	Comments
CTE, linear	17.1 $\mu\text{m/m-}^\circ\text{C}$	9.50 $\mu\text{in/in-}^\circ\text{F}$	
Thermal Conductivity	323.4 W/m-K	2244 BTU-in/hr-ft <sup>2</sup> - $^\circ\text{F}$	
Melting Point	1070 - 1080 $^\circ\text{C}$	1950 - 1980 $^\circ\text{F}$	
Solidus	1070 $^\circ\text{C}$	1950 $^\circ\text{F}$	
Liquidus	1080 $^\circ\text{C}$	1980 $^\circ\text{F}$	

Component Elements Properties	Metric	English	Comments
Chromium, Cr	0.50 - 1.5 %	0.50 - 1.5 %	
Copper, Cu	98.25 - 99.45 %	98.25 - 99.45 %	As Balance
Silicon, Si	0.20 - 0.35 %	0.20 - 0.35 %	

Zirconium Zr Component Elements Properties	0.050 - 0.25 % Metric	0.050 - 0.25 % English	Comments
Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.00000200 ohm-cm	0.00000200 ohm-cm	Plate and Rounds

## Contact Songhan Plastic Technology Co.,Ltd.

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