

## Eagle Brass 151 ZHC® COPPER, Extra Hard

Category : Metal , Nonferrous Metal , Copper Alloy

**Material Notes:**

Alloy C151 has excellent solderability, high conductivity, and good strength. C151 has superior high temperature softening resistance compared to pure copper C110. Applications can be found in high current interconnects, pin grids, welding wire, or other elevated temperature applications. Information provided by Eagle Brass Company

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Eagle-Brass-151-ZHC-COPPER-Extra-Hard.php](http://www.lookpolymers.com/polymer_Eagle-Brass-151-ZHC-COPPER-Extra-Hard.php)

Physical Properties	Metric	English	Comments
Density	8.94 g/cc	0.323 lb/in <sup>3</sup>	Annealed

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell 30T	63 - 65	63 - 65	Thickness > 0.020 Inch
Tensile Strength, Ultimate	407 - 448 MPa	59000 - 65000 psi	
Tensile Strength, Yield	393 - 434 MPa	57000 - 63000 psi	0.2% offset
Elongation at Break	>= 1.0 %	>= 1.0 %	in 2 in.
Tensile Modulus	117 GPa	17000 ksi	

Thermal Properties	Metric	English	Comments
CTE, linear	17.6 µm/m-°C	9.80 µin/in-°F	
	@Temperature 20.0 - 300 °C	@Temperature 68.0 - 572 °F	
Thermal Conductivity	359.7 W/m-K	2496 BTU-in/hr-ft <sup>2</sup> -°F	

Component Elements Properties	Metric	English	Comments
Copper, Cu	99.9 %	99.9 %	
Zirconium, Zr	0.10 %	0.10 %	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.00000187 ohm-cm	0.00000187 ohm-cm	Annealed

## Contact Songhan Plastic Technology Co.,Ltd.

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