

## CMW® ELKALOY D130 Copper Alloy, Aluminum Bronze

Category : Metal , Nonferrous Metal , Copper Alloy , Bronze

### Material Notes:

ELKALOY® D alloys are aluminum bronze type casting alloys. The sequence, ELKALOY® D, D110, D120, D130 materials represents increasing hardness and abrasion resistance but reduced electrical and thermal conductivity and ductility. In the ELKALOY® D alloy impurities (including iron) are kept low to obtain maximum electrical thermal conductivity. ELKALOY® D130 material is recommended for extremely heavy duty applications where ELKALOY® D, ELKALOY® D110, and ELKALOY® D120 materials proved too low in mechanical properties. In addition, it is used for guideposts, bushings, forming die rings and inserts, wiping blocks and forming tools where no impact is involved. It is especially good in forming stainless steel. Information provided by CMW Inc.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_CMW-ELKALOY-D130-Copper-Alloy-Aluminum-Bronze.php](http://www.lookpolymers.com/polymer_CMW-ELKALOY-D130-Copper-Alloy-Aluminum-Bronze.php)

Physical Properties	Metric	English	Comments
Density	7.20 g/cc	0.260 lb/in <sup>3</sup>	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell C	35	35	
Tensile Strength, Ultimate	586 MPa	85000 psi	
Tensile Strength, Yield	483 MPa	70100 psi	
Elongation at Break	0.50 %	0.50 %	
Reduction of Area	0.00 %	0.00 %	
Modulus of Elasticity	103 GPa	14900 ksi	

Thermal Properties	Metric	English	Comments
CTE, linear	18.0 μm/m-°C	10.0 μin/in-°F	
	@Temperature 100 °C	@Temperature 212 °F	
Thermal Conductivity	67.0 W/m-K	465 BTU-in/hr-ft <sup>2</sup> -°F	
Melting Point	1025 - 1060 °C	1877 - 1940 °F	
Solidus	1025 °C	1877 °F	
Liquidus	1060 °C	1940 °F	

Component Elements Properties	Metric	English	Comments
Aluminum, Al	14 %	14 %	

<b>Component Elements Properties</b>	<b>Metric</b>	<b>English</b>	<b>Comments</b>
Co + Ni	1.5 - 2.55 %	1.5 - 2.55 %	
Copper, Cu	78.55 - 79.4 %	78.55 - 79.4 %	
Iron, Fe	4.6 %	4.6 %	

  

<b>Electrical Properties</b>	<b>Metric</b>	<b>English</b>	<b>Comments</b>
Electrical Resistivity	0.0000192 ohm-cm	0.0000192 ohm-cm	9 % IACS

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China