

## California Fine Wire Stablohm 800 Nickel, Chromium, Aluminum, and Copper Resistance Wire

Category : Metal , Electronic/Magnetic Alloy , Nonferrous Metal , Nickel Alloy

### Material Notes:

All values may vary dependent on specific design and usage. Capabilities: Wire, Ribbon, Square, Insulated, Plated. Information provided by California Fine Wire.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_California-Fine-Wire-Stablohm-800-Nickel-Chromium-Aluminum-and-Copper-Resistance-Wire.php](http://www.lookpolymers.com/polymer_California-Fine-Wire-Stablohm-800-Nickel-Chromium-Aluminum-and-Copper-Resistance-Wire.php)

Physical Properties	Metric	English	Comments
Density	8.11 g/cc	0.293 lb/in <sup>3</sup>	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	689 MPa	100000 psi	Annealed
	1210 MPa	175000 psi	Stress relieved
	1380 MPa	200000 psi	Hard

Thermal Properties	Metric	English	Comments
CTE, linear	12.2 $\mu\text{m}/\text{m}\cdot\text{°C}$	6.78 $\mu\text{in}/\text{in}\cdot\text{°F}$	
	@Temperature 20.0 $\text{°C}$	@Temperature 68.0 $\text{°F}$	
Specific Heat Capacity	0.435 $\text{J}/\text{g}\cdot\text{°C}$	0.104 $\text{BTU}/\text{lb}\cdot\text{°F}$	
	@Temperature 20.0 $\text{°C}$	@Temperature 68.0 $\text{°F}$	
Thermal Conductivity	13.1 $\text{W}/\text{m}\cdot\text{K}$	90.9 $\text{BTU}\cdot\text{in}/\text{hr}\cdot\text{ft}^2\cdot\text{°F}$	
Melting Point	1395 $\text{°C}$	2543 $\text{°F}$	
Maximum Service Temperature, Air	316 $\text{°C}$	601 $\text{°F}$	Operating Temperature

Component Elements Properties	Metric	English	Comments
Aluminum, Al	2.5 %	2.5 %	
Chromium, Cr	20 %	20 %	
Copper, Cu	2.5 %	2.5 %	
Nickel, Ni	75 %	75 %	

Electrical Properties	Metric	English	Comments
-----------------------	--------	---------	----------

Electrical Properties	Metric	English	Comments
-----------------------	--------	---------	----------

0.000133 ohm-cm

0.000133 ohm-cm

3% tolerance on sizes below 0.02, 5% tolerance on sizes above 0.02

Descriptive Properties	Value	Comments
Magnetic	None	
Temperature Coefficient of Resistance	±0.00002 ohms/ohm-°C	0-100°C
Thermal EMF vs. Copper	<+1	

## 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