

Special Metals Nickel 205

Category : Metal , Nonferrous Metal , Nickel Alloy , Pure Element

Material Notes:

Wrought nickel similar to Nickel 200 but with compositional adjustments to enhance performance in electrical and electronic applications. Ferromagnetic. Used for the anodes and grids of electronic valves, magnetostrictive transducers, lead wires, transistor housings, and battery cases. Standard product forms are sheet, strip and wire. Data provided by the manufacturer, Special Metals.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Special-Metals-Nickel-205.php

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

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	345 MPa	50000 psi	Annealed
Tensile Strength, Yield	90.0 MPa @Strain 0.200 %	13100 psi @Strain 0.200 %	Annealed
Elongation at Break	45 %	45 %	Annealed

Thermal Properties	Metric	English	Comments
CTE, linear	13.3 Åµm/m-Å°C @Temperature 20.0 - 100 Å°C	7.39 Åµin/in-Å°F @Temperature 68.0 - 212 Å°F	
Specific Heat Capacity	0.456 J/g-Å°C	0.109 BTU/lb-Å°F	
Thermal Conductivity	75.0 W/m-K	521 BTU-in/hr-ft ² -Å°F	
Melting Point	1435 - 1446 Å°C	2615 - 2635 Å°F	
Solidus	1435 Å°C	2615 Å°F	
Liquidus	1446 Å°C	2635 Å°F	

Component Elements Properties	Metric	English	Comments
Carbon, C	<= 0.15 %	<= 0.15 %	
Copper, Cu	<= 0.15 %	<= 0.15 %	
Iron, Fe	<= 0.20 %	<= 0.20 %	
Magnesium, Mg	0.010 - 0.080 %	0.010 - 0.080 %	

Manganese Mn Component Elements Properties	$\leq 0.35\%$ Metric	$\leq 0.35\%$ English	Comments
Nickel, Ni	$\geq 99\%$	$\geq 99\%$	Including Cobalt
Silicon, Si	$\leq 0.15\%$	$\leq 0.15\%$	
Sulfur, S	$\leq 0.0080\%$	$\leq 0.0080\%$	
Titanium, Ti	0.010 - 0.050 %	0.010 - 0.050 %	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.00000950 ohm-cm	0.00000950 ohm-cm	
Curie Temperature	360 Â°C	680 Â°F	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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