



C21000 Gilding, 95%

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Chemical Composition - Limits		Chemical Composition - Nominal	
Cu 94.0-96.0 (99.8 min incl named elements)		Cu 95	
Zn rem		Zn 5	
Pb 0.05 max			
Fe 0.05 max			
Specifications		Fabrication Index	
ASTM B36		Soldering	5 - Excellent
ASTM B134		Hot Worked	4 - Very Good
		Cold Worked	5 - Excellent
		Brazing	5 - Excellent
		Machinability	1 - Poor

Physical Properties

Annealing Range (Min)	800 °F
Annealing Range (Max)	1450 °F
Density	0.32 lb/in ³
Electrical Resistivity (Annealed)	18.5 Ω·cir-mil/ft @ 68 °F
Electrical Conductivity (Annealed)	56% IACS @ 68 °F
Thermal Conductivity	135 Btu/ft ² /ft-hr/°F @ 68 °F
Coefficient of Thermal Expansion	10 per °F (68-572 °F)
Modulus of Elasticity (Tension)	17 ksi
Modulus of Rigidity (Tension)	6 ksi
Melting Point (Solidus)	1,620 °F
Melting Point (Liquidus)	1,880 °F

Round Wire

TEMPER NAME	TEMPER CODE	TENSILE STRENGTH (ksi)		MILL LIMITS (inch)
		Min	Max	
1/8 Hard	H00	35.0	45.0	.0010 - .1285 inch
1/4 Hard	H01	41.0	51.0	
1/2 Hard	H02	49.0	58.0	
3/4 Hard	H03	57.0	64.0	
Hard	H04	61.0	68.0	
Extra Hard	H06	66.0	73.0	
Spring	H08	72.0		

Square Wire

TEMPER NAME	TEMPER CODE	TENSILE STRENGTH (ksi)		MILL LIMITS (inch)
		Min	Max	
1/8 Hard	H00	35.0	45.0	.0100 - .0808 inch
1/4 Hard	H01	41.0	51.0	
1/2 Hard	H02	49.0	58.0	
3/4 Hard	H03	57.0	64.0	
Hard	H04	61.0	68.0	
Extra Hard	H06	66.0	73.0	
Spring	H08	72.0		

Rolled Flat

TEMPER NAME	TEMPER CODE	TENSILE STRENGTH (ksi)		MILL LIMITS (inch)
		Min	Max	

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Rolled Flat

TEMPER NAME	TEMPER CODE	TENSILE STRENGTH (ksi)		MILL LIMITS (inch)
		Min	Max	
1/2 Hard	H02	42.0	52.0	.0100 - .0500 inch
3/4 Hard	H03	46.0	56.0	Width: .0150 - .2500 inch
Hard	H04	50.0	59.0	Thickness:
1/4 Hard	H01	37.0	47.0	
Extra Hard	H06	56.0	64.0	
Spring	H08	60.0	68.0	