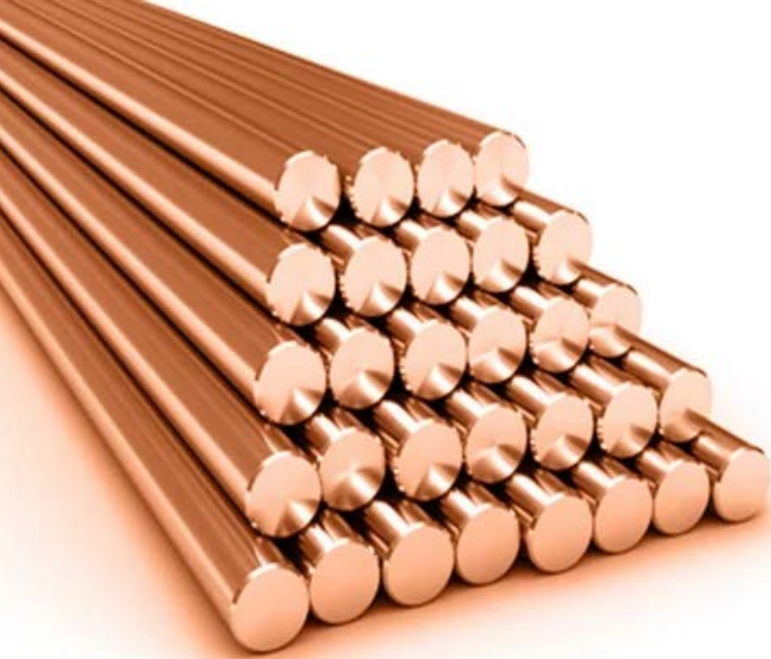


COPPER

C101 - CW004A



C101 - CW004A

Copper C101 is a highly pure, oxygen-free copper alloy with a minimum copper content of 99.99%. Known for its excellent electrical and thermal conductivity, it is widely used in electrical and electronic applications, as well as in various industrial and engineering contexts where high ductility and corrosion resistance are essential. Copper C101 can be annealed to restore ductility and relieve internal stresses.

KEY FEATURES

- High conductivity
- Excellent corrosion resistance
- High ductility and malleability
- High purity

CHEMICAL PROPERTIES

Copper (Cu)	Silver (Ag)	Oxygen (O)	Other Impurities
99.99%	0.0025%	0.0005%	0.001%

MECHANICAL PROPERTIES

Tensile strength (N/mm ²)	220-250
Yield strength (N/mm ²)	70-100
Elongation (% at break)	40-50
Hardness (HV)	40-50
Proof stress 0.2% (MPa)	50-340

PHYSICAL PROPERTIES

Density (kg/m ³)	8940	
Modulus of elasticity (Gpa)	117	
Mean coefficient of thermal expansion	0-100°C (µm/m/°C)	16.8
	0-350°C (µm/m/°C)	17.7
	0-538°C (µm/m/°C)	18.7
Thermal conductivity	at 100°C (W/m.K)	380
	at 500°C (W/m.K)	340
Specific Heat 0-100°C (J/kg.K)	393	
Electrical resistivity (nΩ.m)	168	
Melting point (°C)	1083	

MARKET SECTORS



Electrical Industry

Wiring, cables, connectors, PCBs, semi-conductors, transformers



Automotive Industry

Vehicle wiring harnesses, connectors, radiators



Industrial & Manufacturing

Heat exchangers, machinery components, plumbing parts



Medical Devices

Medical instruments, diagnostic equipment, MRI machines



Architecture & Construction

Roofing, cladding, electrical systems



Aerospace Industry

Spacecraft, aircraft components, communication systems