



CuCr1

Pure Copper / Conductive Copper

Standardization:
Pure Copper

ALLOY DESCRIPTION

It is a low-alloy / high-purity copper material accepted as a reference for applications requiring high electrical and thermal conductivity. It is perfectly suited for extreme cold forming and bending operations.

CHEMICAL COMPOSITION (% WEIGHT)

| Fe (%) | Si (%) | Cr (%) |
|----------|---------|-----------|
| max 0.08 | max 0.1 | 0.5 - 1.2 |

MECHANICAL PROPERTIES (MIN.)

| | |
|----------------|----------------|
| Elongation (A) | 30 |
| Hardness (HB) | 65 - 90 |

PHYSICAL PROPERTIES

| | |
|---------------------|---------------------------------|
| Density | 8.90 [kg/dm³] |
| Melting Temperature | ~1080 - 1083 [°C] |
| Elk. Conductivity | ~45 - 58 [MS/m] |
| Elasticity Modulus | 115 [kN/mm²] |

CASTING / MANUFACTURING METHODS

| | |
|----|--------------------------------|
| EK | Extrusion (Rod/Profile) |
| GS | sand casting |
| GM | Permanent mold casting |
| GZ | Centrifugal casting |

AREAS OF APPLICATION

| | |
|------------------------------|--------------------------|
| Electrical Conductors | Heat Exchangers |
| Connectors | Transformer Parts |
| Switch Components | |

MACHINABILITY & CHARACTERISTICS

Due to its pure structure, it is extremely ductile. In machining, it forms long and sticky chips, requiring sharp-geometry tools. Very suitable for soldering and welding. It has good natural resistance to corrosive atmospheres.

The technical information specified in this document reflects the standard reference values of international EN and DIN norms. Deviations may be observed depending on final production conditions.

CORUM BRONZE

E-mail : info@corumbronz.com | Web : www.corumbronz.com