

C210 Brass - C21000 (Gilding Metal)

Overview

C210 Brass, also known as Gilding Metal or C21000, is a copper-zinc alloy known for its deep red color, ductility, and ease of cold working. With a very high copper content of 95% and only 5% zinc, it belongs to the alpha brass category and offers excellent formability and corrosion resistance. This alloy is prized for applications requiring both excellent formability and a rich, reddish hue similar to pure copper.

Chemical Composition

| Element | Content (%) |
|-------------|--------------|
| Copper (Cu) | 94.0 - 96.0 |
| Zinc (Zn) | Balance (~5) |
| Lead (Pb) | ≤ 0.05 |
| Iron (Fe) | ≤ 0.05 |

Key Properties

- Excellent corrosion resistance (similar to copper)
- Superior electrical conductivity due to high copper content
- Excellent ductility and formability
- Deep reddish color appearance
- Good cold working characteristics
- More often cold formed than machined

Applications

- Coinage and medallions
- Jewelry and decorative items
- Ammunition components (bullet jackets)
- Electrical and electronic components
- Emblems and badges
- Architectural trim

Standards

- UNS: C21000
- ASTM: B134 (Seamless Tubes)