



Application Datasheet

Standard Designation for Cast Copper Alloys

Revision Date: June 12, 2018

High Copper Alloys (C81400 - C83299)

* = are alloys registered with the U.S. EPA as Antimicrobial.

| UNS # | Cu | | Pb | | Sn | | Zn | | Fe | | Ni | | Al | | Ag | | Be | | Co | | Cr | | Si | | Other Named Elements | | Status | |
|---------------------------------------|------------------------|--------------------|------|------|------|------|------|------|------|------|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|------|--------|-------------------|
| | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | | |
| C81400 Beryllium Copper 70C | | Rem ⁽¹⁾ | | | | | | | | | | | | | | | 0.02 | 0.10 | | | 0.6 | 1.0 | | | | | | active |
| C81500 Chrome Copper | | Rem ⁽¹⁾ | 0.02 | | 0.10 | | 0.10 | | 0.10 | | | | 0.10 | | | | | | | | 0.40 | 1.5 | | 0.15 | | | | active |
| C81540 | 95.1 ⁽¹⁾⁽²⁾ | | 0.02 | | 0.10 | | 0.10 | | 0.15 | 2.0 | 3.0 ⁽³⁾ | | 0.10 | | | | | | | | 0.10 | 0.6 | 0.40 | 0.8 | | | | active |
| C81700* Copper Beryllium | 94.2 ⁽¹⁾ | | | | | | | | | 0.25 | 1.5 | | | 0.8 | 1.2 | 0.30 | 0.55 | 0.25 | 1.5 | | | | | | | | | inactive 03/92 |
| C81800* Beryllium Copper 50C | 95.6 ⁽¹⁾ | | | | | | | | | | | | | 0.8 | 1.2 | 0.30 | 0.55 | 1.4 | 1.7 | | | | | | | | | inactive 03/92 |

| UNS # | Cu | | Pb | | Sn | | Zn | | Fe | | Ni | | Al | | Ag | | Be | | Co | | Cr | | Si | | Other Named Elements | | Status | |
|--|------|--------------------|------|------|------|------|------|------|------|------|------|---------------------|------|------|------|------|------|------|---------------------|---------------------|------|------|------|------|----------------------|------|-------------------|--------|
| | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | | |
| C82000* Beryllium Copper 10C | | Rem ⁽¹⁾ | | 0.02 | | 0.10 | | 0.10 | | 0.10 | | 0.20 ⁽⁴⁾ | | 0.10 | | | | 0.45 | 0.8 | 2.40 ⁽⁴⁾ | 2.70 | | 0.09 | | 0.15 | | | active |
| C82100* Copper Beryllium | 95.5 | | | | | | | | | | 0.25 | 1.5 | | | | | 0.35 | 0.8 | 0.25 | 1.5 | | | | | | | inactive 03/92 | |
| C82200* Beryllium Copper 30C | | Rem ⁽¹⁾ | | | | | | | | | 1.0 | 3.0 | | | | | 0.35 | 0.8 | | 0.30 | | | | 0.15 | | | active | |
| C82400* Beryllium Copper 165C | | Rem ⁽¹⁾ | | 0.02 | | 0.10 | | 0.10 | | 0.20 | | 0.20 | | 0.15 | | | 1.60 | 1.85 | 0.20 | 0.65 | | 0.09 | | | | | active | |
| C82500* Beryllium Copper 20C | | Rem ⁽¹⁾ | | 0.02 | | 0.10 | | 0.10 | | 0.25 | | 0.20 ⁽⁴⁾ | | 0.15 | | | 1.90 | 2.25 | 0.35 ⁽⁴⁾ | 0.70 | | 0.09 | 0.20 | 0.35 | | | active | |
| C82510* Beryllium Copper 21C | | Rem ⁽¹⁾ | | 0.02 | | 0.10 | | 0.10 | | 0.25 | | 0.20 | | 0.15 | | | 1.90 | 2.15 | 1.0 | 1.2 | | 0.09 | 0.20 | 0.35 | | | active | |
| C82600* Beryllium Copper 245C | | Rem ⁽¹⁾ | | 0.02 | | 0.10 | | 0.10 | | 0.25 | | 0.20 | | 0.15 | | | 2.25 | 2.55 | 0.35 | 0.65 | | 0.09 | 0.20 | 0.35 | | | active | |
| C82700* High Copper Alloy | | Rem ⁽¹⁾ | | 0.02 | | 0.10 | | 0.10 | | 0.25 | 1.0 | 1.5 | | 0.15 | | | 2.35 | 2.55 | | | | 0.09 | | 0.15 | | | active | |

| UNS # | Cu | | Pb | | Sn | | Zn | | Fe | | Ni | | Al | | Ag | | Be | | Co | | Cr | | Si | | Other Named Elements | | Status | |
|--|------|--------------------|------|------|------|------|------|------|------|------|------|---------------------|------|------|------|------|------|------|------|------|---------------------|------|------|------|----------------------|------|--------|--------|
| | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | Min% | Max% | | |
| C82800* Beryllium Copper 275C | | Rem ⁽¹⁾ | | 0.02 | | 0.10 | | 0.10 | | 0.25 | | 0.20 ⁽⁴⁾ | | 0.15 | | | | 2.50 | 2.85 | 0.35 | 0.70 ⁽⁴⁾ | | 0.09 | 0.20 | 0.35 | | | active |

* = are alloys registered with the U.S. EPA as Antimicrobial.

(1) = Cu + Sum of Named Elements 99.5% min.

(2) = Cu value includes Ag.

(3) = Ni value includes Co.

(4) = Ni + Co.