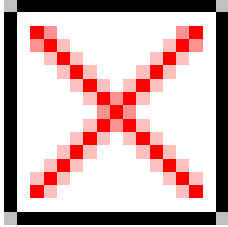


C28000

CuZn40

CW617N



AMWL offers a wide range of brass rolled products in the form of Foils, Strips, Sheets and circles/discs to meet our customeros needs for industrial manufacturing. .

#### 60/40 Characteristics

CuZn40 is an economical brass alloy with high Zinc content, good forming properties and medium strength.



| Alloy Name       |        |
|------------------|--------|
| UNS              | C28000 |
| IS/ISO           | CuZn40 |
| DIN CEN/TS 13388 | CW617N |

This alloy is as per RoHS specification

| Chemical Composition | Weight percentage |
|----------------------|-------------------|
| Cu                   | 58.5 - 62.0 %     |
| Pb                   |                   |
| Fe                   | ≤ 0.1 %           |
| Zn                   | Remainder %       |
| Total Impurity       | < 0.75 %          |

#### Main Applications

|                       |  |
|-----------------------|--|
| <b>Industrial :</b>   | Locks, Metal Fittings, Keys.   |
| <b>Architecture :</b> | Decoration, Hardware,Door Frames, Large Architectural Trim, Large sheet. |

#### Physical Properties Typical values in annealed temper at 20 °C

|  |           |                     |
|--|-----------|---------------------|
| Density  | 8.41      | g/cm <sup>3</sup>   |
| Thermal expansion coefficient -191 .. 16                           | 20.3      | 10 <sup>-6</sup> /K |
| 0 .. 300°C   | 21.0      | 10 <sup>-6</sup> /K |
| Specific heat capacity   | 0.375     | J/(g·K)             |
| Thermal conductivity   | 117       | W/(m·K)             |
| Electrical conductivity (1 MS/m = 1 m/(Ω mm <sup>2</sup> ))        | ≥ 15      | MS/m                |
| Electrical conductivity (IACS)                                     | 26        | %                   |
| Thermal coefficient of electrical resistance (0 .. 200 C)          | 1.7       | 10 <sup>-3</sup> /K |
| Modulus of elasticity ( 1 GPa = 1 kN/mm <sup>2</sup> ) cold formed | 99....115 | GPa                 |
|  | 102       | GPa                 |

#### Mechanical Properties (EN 1652)

| Temper          | Tensile Strength              | Yield Strength                   | Elongation Minimum | Hardness HV |
|-----------------|-------------------------------|----------------------------------|--------------------|-------------|
|                 | Rm<br>MPa(N/mm <sup>2</sup> ) | Rp0.2<br>MPa(N/mm <sup>2</sup> ) | A50mm<br>%         |             |
| O (Soft)        | 275 Min                       | -----                            | 35 Min             | 85 Max      |
| HB (Half Hard)  | 420 Min                       | -----                            | 15 Min             | 100 Min     |
| HD (Half Hard)  | 490 Min                       | -----                            | 5 Min              | 125 Min     |
| HE (Extra Hard) | 525 Min                       | -----                            |                    | 165 Min     |

