SUNDWIGER Messingwerk

Brass (Copper-Zinc) **MB36**

| Material Designation | |
|----------------------|--------|
| DIN-EN Symbol | CuZn36 |
| DIN-EN | CW507L |
| UNS | C27000 |
| JIS | C2700 |

| Physical Properties | | |
|----------------------------------|------|-----------------------------|
| Electrical conductivity soft | 14.5 | MS/m |
| Thermal conductivity | 120 | W/(m·K) |
| Thermal expansion coefficient ** | 20.2 | 10-6/K |
| Density | 8.4 | g/cm³ |
| Modulus of elasticity | 110 | GPa = kN/mm ² |
| | | |

* Reference values at room temperature ** Between 20 and 300 °C

Nominal Composition (mass content in %)

| Cu | Balance |
|-------|---------|
| Sn | < 0.05 |
| Zn | 36 |
| Ni | < 0.2 |
| Fe | < 0.05 |
| Al | < 0.02 |
| Pb | < 0.005 |
| Other | < 0.1 |
| | |

Typical Applications

- Jewellery
- Metal ware
- Transistor carriers
- Deep drawing parts
- Stamped-bent parts
 - Connectors

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About The Alloy

MB36 is a brass having good workability, drawability and good properties on plating.

Among the Copper Zinc Alloys MB36 exhibits a high electrical and thermal conductivity at a moderate strength level. The colour of MB36 is due to the increased Zn content already deep yellow. Applications are found in terminal connectors, stamped and deep drawn parts.

MB36 is an single phase Copper alloy and available in a temper condition which allows good cold forming and deep drawing with almost no earring.

MB36 meets with respect to Pb and Cd the OEKO-TEX Standard 100.

| Mechanical Properties *) | | | | | | | |
|--|------------------------|-----------------------------|-----------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Temper condition | | O30 R 290 H 55 | H01 R 360 H 95 | H02 R 410 H 120 | H03 R 460 H 140 | H04 R 490 H 155 | H06 R 550 H 170 |
| Tensile strength in N/mm ² | | 290 - 370 | 360 - 440 | 410 - 490 | 460 - 530 | 490 - 560 | 550 - 640 |
| 0.2 % yield Strength in N/mm ² | | < 190 | > 200 | > 300 | > 380 | > 450 | > 500 |
| Elongation A_{L50} % | | > 40 | > 30 | > 15 | > 10 | > 5 | > 1 |
| Vickers hardness HV | | 55 - 95 | 95 - 125 | 120 - 150 | 140 - 170 | 155 - 185 | 170 - 200 |
| Electrical conductivity in % IACS | | 25 | 25 | 24 | 24 | 23 | 23 |
| Minimum radius of the bending mandrel for 90° bend and strip thickness s | | | | | | | |
| 0.10 ≤ s ≤ 0.25 mm | transverse parallel | 0 x s 0 x s | 0 x s 0 x s | 0 x s 0 x s | 0 x s 0 x s | 0 x s 0 x s | 0.5 x s 1 x s |
| 0.25 < s ≤ 0.50 mm | transverse parallel | 0 x s 0 x s | 0 x s 0 x s | 0 x s 0 x s | 0 x s 0.5 x s | 0 x s 1 x s | 1 x s 2 x s |
| | | | | | | | |

*) Reference values

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Processing Instructions

| very good |
|--------------|
| satisfactory |
| very good |
| very good |
| very good |
| good |
| satisfactory |
| sufficient |
| |

Available Dimensions

Bright pre-rolled strips 1 to 2.5 mm

Precision strip thickness from 0.05 to 1.2 mm

Strip width from 3.0 to 600 mm, but at least 10 times of the strip thickness

Other widths available on request.

| Your | Local | Contact | Person | |
|------|-------|---------|--------|--|
| | | E | urope | |

SUNDWIGER Messingwerk

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Available Versions

Coils with standard outer diameters of 1200 mm

Strips in reel form with coil weight of up to 1500 kg

Multipancake up to 2.5 t

Hot-dip tinned strips

Profiled strips

Electroplated strips (tin, nickel)

Asia

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We reserve the right to make alterations especially where necessitated by technical developments or changes in availability. Please ask for the latest edition of this material data sheet.