SUNDWIGER Messingwerk

Brass (Copper-Zinc) **MB37**

Material Designation	
DIN-EN Symbol	CuZn37
DIN-EN	CW508L
UNS	C27200
JIS	C2720

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	37
Ni	< 0.2
Fe	< 0.05
AI	< 0.02
Pb	< 0.005
Other	< 0.1

Typical Applications

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

.

About The Alloy

MB37 is a brass having good workability, drawability and good properties on plating.

Among the Copper Zinc Alloys MB37 exhibits a high electrical and thermal conductivity at a moderate strength level. The colour of MB37 is due to the increased Zn content already deep yellow. Applications are found in terminal connectors, stamped and deep drawn parts.

The alloy is registered with the U.S. EPA as Antimicrobial and with respect to Pb and Cd meets 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

Brass (Copper-Zinc) **MB37**



SUNDWIGER

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	
Europe	

SUNDWIGER Messingwerk

Sundwiger Messingwerk GmbH

Hönnetalstraße 110 58675 Hemer Deutschland Tel. +49 2372 661-100 Fax +49 2372 661-48100 E-Mail: sales-sundwig@sundwiger-mw.com www.sundwiger-mw.com

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

SUNDWIGER Messingwerk

Sundwiger Metal (Shenzhen) Co. Ltd.

5F, Block 25, Shatoujiao Free Trade Zone 518081 Shenzhen P.R. of China Tel. +86 755 2235 7466 Fax +86 755 25260974 E-Mail: sales@sundwiger-mw.com.cn www.sundwiger-mw.com

The information given in this material data sheet, which in any case provides no guarantee of particular characteristics, has been compiled to the best of our knowledge but is given without any obligation on our part. Our liability is determined solely by the individual contract terms, in particular by our general conditions of sale.

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.

