

Alloy Designation

EN	CuZn10
DIN CEN/TS 13388	CW501L
UNS	C22000

Chemical Composition (Balance)

Weight percentage

Cu	90	%
Zn	Rest	%

Characteristics

CuZn10 has very good cold forming properties and is well suited for e.g. coinage, beating, embossing. This alloy has a higher strength as pure copper. It has good welding and brazing properties as well as a good corrosion resistant and is not fragile to stress corrosion and dezincification. **CuZn10** is principally used in jewellery, metal goods, watch industry and in electronic industry for installation parts.

Main Applications

Jewellery and metal good, Components for the electrical industry.

Mechanical Properties (EN 1652)

Temper	Tensile Strength Rm	Yield Strength Minimum Rp0.2	Elongation Minimum A50mm	Hardness HV *	Bending 90°	
	MPa	MPa	%	HV	gw rel. Bending Radius R/T	bw
					Strip Thickness ≤ 0.50mm	
R240	240 .. 290	≤ 140 *	36	50 .. 100	0	0
R280	280 .. 360	200 *	13	80 .. 130	0	0
R350	350 .. 450	290 *	4	110 .. 160	-	-

* only for information

Physical Properties

Typical values in annealed temper at 20 °C

Density		8.80	g/cm ³
Thermal expansion coefficient	20 .. 300 °C	18.2	10 ⁻⁶ /K
Specific heat capacity		0.376	J/(g·K)
Thermal conductivity		184	W/(m·K)
Electrical conductivity	MS/m	25	MS/m
Electrical conductivity	IACS	43	%
Thermal coefficient of electrical resistance	(0 .. 100 °C)	1.8	10 ⁻³ /K
Modulus of elasticity	GPa	124	GPa

Fabrication Properties *

Cold Forming Properties	Good
Machinability (Rating 20)	Less suitable
Electroplating Properties	Excellent
Hot Tinning Properties	Excellent
Soft Soldering, Brazing	Excellent
Resistance Welding	Good
Gas Shielded Arc Welding	Good
Laser Welding	Fair

* For more details call our technical service

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