

Cu Zn 10

Réf. ASTM n°UNS : C22000

Réf. Normes Européennes : CW501L

Indicative Chemical Composition

Cu :	90 %
Zn :	solde

TYPICAL APPLICATIONS

Electrical :	Connectors, contacts for electrical installations and car industry
Architectural :	Shop windows, cold formed angles and profiles, decoration
Ornamental :	Custom jewellery, lipstick cases, medals, dials of clocks,...
Thermal :	Thermostats

MECHANICAL CHARACTERISTICS (European Standard : EN 1652)

Temper H :		H 050	H 080	H 110
Hardness	HV	50-80	80-110	≥ 110

Temper R :		R 240	R 280	R 350
Tensile Strength	Ts (MPa)	240-290	280-360	≥ 350
Yeld Strength (1)	Ys 0,2 (MPa)	≤ 140	≥ 200	≥ 290
Elongation (2)	E50 (%)	≥ 36	≥ 13	≥ 4

BENDING RADIUS FOLLOWING THE THICKNESS RELATED TO TEMPER ABOVE

Radius of bending (3)	90° Good Way	0 × t	0 × t	(4)
	90° Bad Way	0 × t	0 × t	(4)

MECHANICAL CHARACTERISTICS FOLLOWING OLD STANDARD

Temper of old NF standard		0	H 11	H 12	H 13	H 14	H 15
Hardness	HV	55-75	68-102	90-120	102-126	118-135	130-150
Tensile Strength	Ts (MPa)	270-330	270-340	320-390	350-420	390-450	440-490
Yeld Strength	Ys 0,2 (MPa)	≤ 160	≥ 190	≥ 290	≥ 320	≥ 370	≥ 420
Elongation	E50 (%)	35	30	14	7	3	1
Radius of bending (3)	90° Good Way	0 × t	0 × t	0 × t	0 × t	0,5 × t	1 × t
	90° Bad Way	0 × t	0 × t	0,5 × t	0,5 × t	1 × t	2 × t

PHYSICAL CHARACTERISTICS (at 20°C) (5)

Density (Kg/dm3)	Electrical Conductivity (% IA CS)	Electrical Resistivity (μΩ,cm)	Thermal Conductivity (W/m,K)	Modulus of Elasticity (kN/nm ²)	Thermal Expansion (10-6/K)	Melting Temperature (°C)	Modulus of Shearing (kN/mm ²)
8,8	44	3,9	188	127	18,2	1025-1045	46,5

(1) Indicative values

(2) For thickness < 2,5 mm

(3) Bending radius is expressed as a function of thickness of the strip

(4) Bending possible to be defined with Griset

(5) values for annealed temper

This document has been prepared for informational purposes and the values are indicative. Our responsibility can not be undertaken without a formal contract review. Our commercial and technical services remain at your service to study the proper matching of your needs in adequacy with physico-mechanical properties of our material.