

Cu Zn 15

Réf. ASTM n°UNS : C23000

Réf. Normes Européennes : CW502L

Indicative Chemical Composition

Cu :	85 %
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 055	H 085	H 105	H 125
Hardness	HV	55-85	85-115	105-135	≥ 125

Temper R :		R 260	R 300	R 350	R 410
Tensile Strength	Ts (MPa)	260-310	300-370	350-420	≥ 410
Yeld Strength (1)	Ys 0,2 (MPa)	≤ 170	≥ 150	≥ 250	≥ 360
Elongation (2)	E50 (%)	≥ 36	≥ 16	≥ 4	—

BENDING RADIUS FOLLOWING THE THICKNESS RELATED TO TEMPER ABOVE _____

Radius of Bending (3)	90° Good Way	0 × t	0 × t	0 × t	(4)
	90° Bad Way	0 × t	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	75-108	115-135	128-148	138-158	152-172
Tensile Strength	Ts (MPa)	275-335	300-370	350-420	390-460	430-500	500-560
Yeld Strength	Ys 0,2 (MPa)	≤ 170	≥ 210	≥ 320	≥ 370	≥ 410	≥ 460
Elongation	E50 (%)	35	30	14	5	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 × 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)
8,75	37	4,7	159	124	18	1000-1025	45,5

(1) Indicative values

(2) For thickness < 2,5 mm

(3) Bending radius is expressed as a function of thickness (t) 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.