

Cu Zn 36

Réf. ASTM n°UNS : C27000

Réf. Normes Européennes : CW507L

Indicative Chemical Composition

Cu :	64 %
Zn :	solde

TYPICAL APPLICATIONS

Electrical :	Sparki Plugs, electrical battery terminals, conections, contacts, bulb bases ...
Mécanique :	Key blanks, clocks components, cases wheels, rivets,.. Matrices d'imprimerie, cadrans...
Miscellaneous :	Type mould, dials,....

MECHANICAL CHARACTERISTICS (European Standard : EN 1652)

Temper H :		H 055	H 095	H 120	H 150	H 170
Hardness	HV	55-95	95-125	120-155	150-180	≥ 170

Temper R :		R 300	R 350	R 410	R 480	R 550
Tensile Strenght	Rm (M pa)	300-370	350-440	410-490	480-560	≥ 550
Yields Strenght (1)	Rp 0,2 (M pa)	≤ 180	≥ 170	≥ 300	≥ 430	≥ 500
Elongation (2)	A50 (%)	≥ 38	≥ 19	≥ 8	≥ 3	—

BENDING RADIUS FOLLOWING THE THICKNESS RELATED TO TEMPER ABOVE

Radius of Bending (3)	90° Good Way	0 × t	0 × t	0 × t	0 × t	(4)
	90° Bad Way	0 × t	0 × t	0 × t	0,5 × 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	60-80	85-125	105-140	128-153	140-160	158-178
Tensile Strenght	Rm (M pa)	300-375	330-400	370-440	420-490	460-530	530-600
Yields Strenght	Rp 0,2 (M pa)	≤ 190	≥ 210	≥ 300	≥ 360	≥ 400	≥ 450
Elongation	A50 (%)	40	30	12	8	4	2
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)
8,45	26	6,6	120	111	20	910-950	40

(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.