

# Cu Zn 37

Réf. ASTM n°UNS : C27200

Réf. Normes Européennes : CW508L

## Indicative Chemical Composition

Cu :	63 %
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 <sup>2</sup> )	Thermal Expansion (10-6/K)	Melting Temperature (°C)	Modulus of Shearing (kN/mm <sup>2</sup> )
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

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