

Cu Sn 0,15

Réf. ASTM n°UNS : C14415
Réf. Normes Européennes : CW0117C

Indicative Chemical Composition

Cu :	solde
Sn :	0,12 %

TYPICAL APPLICATIONS

Electronic and Electrical appts : | semi conductor support

MECHANICAL CHARACTERISTICS (European Standard : NF EN 1758) _____

Temper H :		H 060 (1)	H 085 (1)	H 105 (1)	H 120 (2)
Hardness	HV	60-90	85-110	105-130	120-140

Temper R :		R 250 (1)	R 300 (1)	R 360 (1)	R 420 (2)
Tensile Strength	TS (MPa)	250-320	300-370	360-430	420-490
Elongation	E50 (%)	≥ 9	≥ 4	≥ 3	≥ 2

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	0,5 × t	(4)

MECHANICAL CHARACTERISTICS FOLLOWING OLD TEMPER _____

TEMPER OF OLD NF STANDARD		0	H 11	H 12	H 13	H 14,1	H 14,2
Hardness	HV	50-65	65-90	95-115	100-125	115-130	≥ 120
Tensile Strength	TS (MPa)	230-280	240-300	280-350	310-390	350-430	≥ 380
Yield Strength	YS 0,2 (MPa)	≤ 160	≥ 140	≥ 260	≥ 280	≥ 340	≥ 360
Elongation	E50 (%)	30	25	12	5	2	—
Radius of bending (3)	90° Good Way	0 × t	0 × t	0 × t	0 × t	0,5 × t	(4)
	90° Bad Way	0 × t	0 × t	0 × t	0,5 × t	1 × t	(4)

PHYSICAL CHARACTERISTICS (at 20°C) (5) _____

Density (Kg/dm ³)	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)
8,9	86	2	360	120	18	1083	45

(1) For Thickness < 2 mm

(2) For Thickness < 1 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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