

# CU-OF <sup>(1)</sup>

Réf. ASTM n°UNS : C10200

Réf. Normes Européennes : CW008A

## Indicative Chemical composition

Cu : > 99,95 %

## TYPICAL APPLICATIONS

Electrical :	Special application such as glass/metal sealing in vacuum tubes, electrical equipments used in reducing atmosphere at high temperature,...
Mechanical :	Applications requiring a welding or heating operation in a reducing atmosphere

## MECHANICAL CHARACTERISTICS (European Standard : EN 1652 et EN 13599) \_\_\_\_\_

Temper H :		H 040	H 065	H 090	H 110
Hardness	HV	40-65	65-95	90-110	≥ 110

Temper R :		R 220	R 240	R 290	R 360
Tensile Strength	TS (MPa)	220-260	240-300	290-360	≥ 360
Yield Strength <sup>(2)</sup>	YS 0,2 (MPa)	≤ 140	≥ 180	≥ 250	≥ 320
Elongation <sup>(3)</sup>	E50 (%)	≥ 33	≥ 8	≥ 4	≥ 2

## BENDING RADIUS FOLLOWING THE THICKNESS RELATED TO TEMPER ABOVE \_\_\_\_\_

Radius of Bending <sup>(4)</sup>	90° Good Way	0 × t	0 × t	0 × t	(5)
	90° Bad Way	0 × t	0 × t	0,5 × t	(5)

## MECHANICAL CHARACTERISTICS FOLLOWING OLD STANDARD \_\_\_\_\_

Temper of old NF Standard		0	H 11	H 12	H 13	H 14	H 14,2
Hardness	HV	46-65	60-85	75-105	90-110	105-125	≥ 110
Tensile Strength	TS (MPa)	200-260	230-280	260-320	290-350	310-400	≥ 325
Yield Strength	YS 0,2 (MPa)	≤ 120	≥ 125	≥ 250	≥ 275	≥ 300	≥ 300
Elongation	E50 (%)	25	20	10	4	1	—
Bend Radius <sup>(4)</sup>	90° Good Way	0 × t	0 × t	0 × t	0 × t	0,5 × t	(5)
	90° Bad Way	0 × t	0 × t	0 × t	0,5 × t	1 × t	(5)

## PHYSICAL CHARACTERISTICS (at 20°C) <sup>(6)</sup> \_\_\_\_\_

Density (Kg/dm <sup>3</sup> )	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> )
8,9	> 100	< 1,72	394	120	16,8	1083	45

(1) Old french designation: Cu-c1

(2) Indicative values

(3) For thickness < 2,5 mm

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

(5) Bending possible to be defined with Griset

(6) values for annealed temper

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