TG GRISET

Tel: +33 (0) 3.44.66.34.00
Web: www.griset.com

CuNiP

Indicative Chemical Composition	
Cu :	> 98,8 %
Ni :	0,3 %
P :	0.02 %

TYPICAL APPLICATIONS	
Electronics and electrical :	Semi conductors supports

MECHANICAL CHARACTERISTICS

Temper H :		H 040	H 065	H 090	H 110
Hardness	HV	45-65	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 *(1)*	YS 0,2 (MPa)	≤ 140	≥ 180	≥ 250	≥ 320
Elongation	E50 (%)	≥ 33	≥ 8	≥ 4	≥ 2

BENDING RADIUS FOLLOWING THE THICKNESS RELATED TO TEMPER ABOVE

Radius of Bending *(2)*	90° Good Way	0 × t	0 × t	0 × t	*(3)*
	90° Bad Way	0 × t	0 × t	0,5 × t	*(3)*

MECHANICAL CHARACTERISTICS FOLLOWING OLD STANDARDS

TEMPER OF OLD FRENCH 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 *(2)*	90° Good Way	0 × t	0 × t	0 × t	0 × t	0,5 × t	*(3)*
	90° Bad Way	0 × t	0 × t	0 × t	0,5 × t	1 × t	*(3)*

PHYSICAL CHARACTERISTICS (at 20°C) *(4)*

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)
8,9	> 80	< 2,1	330	128	18	1060-1080	45

(1) For thickness < 2 mm
(2) Bending radius is expressed as a function of thickness (t) of the strip
(3) Bending possible to be defined with Griset
(4) values for annealed temper