



CuNi1P

B98

CHEMICAL COMPOSITION :

Cu min	balance
Ni	0.9-1.20%
P	0.15-0.25%

ALLOY DENOMINATIONS :

MATERIAL N° EN :	CW108B A
WN/MATERIAL N° DIN :	-
ROBERT LAMINAGE :	198
EN :	CUNi1P
DIN :	-
AFNOR :	-
UNS* :	C 19000

*Unified Numbering System (USA)

PHYSICAL PROPERTIES :

Density 20° C	8.9	Kg/dm ³
Melting point	1038-1082	°C
Modulus of elasticity, longitudinal	127	GPa
Thermal Conductivity	253	W/M . K
Electrical Conductivity	≥ 29 (TM state)	M/Ω mm ²
Electrical resistivity	≤ 0.0345 (TM state)	Ω mm ² /M
Coefficient of linear expansion from 20 up to 300°C	18 x 10 ⁻⁶	K ⁻¹
IACS (International Annealed Copper Standard)	≥ 50 (TM state)	%

WORKABILITY :

Coldworking	Very good
Hotworking	Very good (750-850°C)
Machining	Medium
Soldering, brazing	Very good
Tin soldering	Good
Polishing	Good
Annealing temperature	600-700°C
Stress relieved heat treatment temperature	Not necessary

MAIN APPLICATIONS :

Contact components, spring
Appliances
Collector strips, conductors
Deep drawing, stamping

AVAILABLE SIZES :

Widths	from 2 up to 350mm
Thickness	from 0.01up to 2.5mm

CONDITIONING :

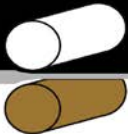
- In coils or cut in length, levelled if specified
- Cut in length, from 0.5 up to 3 m

TOLERANCES :

Depending on product

QUALITY OF EDGES :

Slit edges



Manufacturer SWISSMETAL NORM

TEMPER	ÉTAT PHYSIQUE	THICKNESS		Rm (MPa)		Rp 0.2 (Mpa)	ELONGATION %	Vickers HARDNESS		GRAIN SIZE
				min	max			min	max	
TM 00	R450	0.30	1.00	> 450	-	> 400	> 12	150	-	-
TM 00	H150	0.30	1.00	-	-	-	-	-	-	-
TM 03	R550	0.30	1.00	> 550	-	> 500	> 6	170	-	-
TM 03	H170	0.30	1.00	-	-	-	-	-	-	-
TM 06	R630	0.30	2.00	> 620	-	> 580	> 3	180	-	-
TM 06	H180	0.30	2.00	-	-	-	-	-	-	-
TM 08	R690	0.30	2.00	> 690	-	> 660	> 1	210	-	-
TM 08	H210	0.30	2.00	-	-	-	-	-	-	-

For references only