

Alloys

Material Designation		Composition in % (m/m)								
		Element	Cu ¹	Ag	Bi	O	P	Pb	Other elements (see note)	
Symbolic	Numerical								total	excluded
Cu-ETP	CW004A	max.	99.90 ^a	–	–	–	–	–	–	Ag, O
		min.	–		0,0005	0.040 ^b	–	0,0005	0,03	
Cu-FRHC	CW005A	max.	99.90 ^a			–	–	–	–	Ag, O
		min.	–			0.040 ^b	–	–	0,04	
Cu-OF	CW008A	max.	99.95 ^a		–	–	–	–	–	Ag
		min.	–		0,0005	– ^c	–	0,0005	0,03	
CuAg0,10	CW013A	max.	Rest	0,08	–	–	–	–	–	Ag, O
		min.	–	0,12	0,0005	0.040 ^b	–	–	0,03	
CuAg0,10P	CW016A	max.	Rest	0,08	–	–	0,001	–	–	Ag, P
		min.	–	0,12	0,0005	– ^c	0,007	–	0,03	
CuAg0,10(OF)	CW019A	max.	Rest	0,08	–	–	–	–	–	Ag, O
		min.	–	0,12	0,0005	– ^c	–	–	0,0065	
Cu-PHC	CW020A	max.	99.95 ^a		–	–	0,001	–	–	Ag, P
		min.	–		0,0005	– ^c	0,006	0,0005	0,03	

Material Designation		Composition in % (m/m)								
		Element	Cu ¹	Ag	Bi	O	P	Pb	Other elements (see note)	
Symbolic	Numerical								total	excluded
Cu-HCP	CW021A	max.	99.95 ^a		–	–	0,002	–	–	Ag, P
		min.	–		0,0005	– ^c	0,007	0,0005	0,03	
Cu-DLP	CW023A	max.	99.90 ^a		–		0,005	–	–	Ag, Ni, P
		min.	–		0,0005		0,013	0,0005	0,03	
Cu-DHP	CW024A	max.	99.90 ^a				0,015	–	–	–
		min.	–				0,040	–	–	
NOTE – The total of other elements (different from copper) is defined as the sum of Ag, As, Bi, Cd, Co, Cr, Fe, Mn, Ni, O, P , Pb, S, Sb, Se, Si, Sn, Te and Zn, with the exclusion of any of the elements whose value is indicated individually.										
^a including silver (Ag), up to a maximum of 0.015%										
^b Up to 0.060% of oxygen content is permitted, subject to an agreement between client and supplier..										
^c Oxygen content must be such that the material complies with the requisites for embrittlement by heating in a hydrogen atmosphere as in Norm En 1976.										