

PHOSPHOROUS BEARING ALLOYS WITH AND WITHOUT SILVER

Code	Composition %					Melt. Range	Density	Tensile Strength	Corresponding standard		
	Ag	Cu	P	Sn		°C	g/cm ³	Kg/mm ²	DIN 8513	BS 1845	AWS A5.8.89
CuP8		92	8			710-750	8.0	60	L-CuP8		
CuP7.5		92.5	7.5			710-760	8.1	58			
CuP7		93	7			710-800	8.1	58	L-CuP7	CP 3	BCuP-2
CuP6		94	6			710-880	8.1	56	L-CuP6	CP 6	
CuP7Sn		86	7	7		650-700	8.0	60			
Ag0,3CuPSn	0.3	91.9	7	0.8		700-790	8.1	60			
Ag0,4CuP	0.4	93	6.5			650-810	8.2	58			
Ag2CuP	2	91.5	6.5			650-810	8.1	55	L-Ag2P	CP 2	BCuP-6
Ag5CuP	5	89	6			650-810	8.2	55	L-Ag5P	CP 4	BCuP-3
Ag6CuP	6	87	7			650-740	8.3	55			BCuP-4
Ag15CuP	15	80	5			650-800	8.4	54	L-Ag15P	CP 1	BCuP-5
Ag15CuP7	15	78	7			650-750	8.4	54			
Ag18CuP	18	75	7			650	8.4	50			

BRAZING AND GAS WELDING

Code	Composition %									Melt. Range	Tensile Strength	Brazing	Gas Welding
	Cu	Zn	Ag	Ni	Al	Mn	Sn	Si		°C	Kg/mm ²		
Cu99.9	99.9	92	8						P	1080	22	X	
CuSn	Bal					X	0.8	X		1020-1050	22		X
CuAg	Bal		1						P	1060-1080	20		X
CuSi2Mn	Bal					1	X	2		1030-1050	28		X
CuSi3	Bal					1		3		910-1025	35		X
CuSn6	Bal						6		P	910-1040	26	X	X
CuSn12	Bal						12		P	825-990	35	X	X
Cu60Zn	60	Bal						X		890-910	40	X	
Cu59ZnSn	59	Bal				X	1	X		870-890	45	X	
Cu59ZnAg	59	Bal	1			X	X	X		870-890	40	X	
Cu59ZnSnNi	59	Bal		X		X	X			860-890	45	X	
Cu48ZnNi10	48	Bal		10				X		910-930	54	X	
Cu48ZnNi9Ag	48	Bal	1	9		X		X		890-920	54	X	
Cu53ZnNi6	53	Bal		6				X		900-920	49	X	

FLUXES

Code	Operating range	Powder	Paste	Standard	Applications
	°C			DIN 8511	
FLUX BR1	850-1100	X	X	F-SH-2	Brazing with Brass
FLUX BR2	850-1100	X	X	F-SH2	Brazing with Nickel Bronze

MIG / TIG WELDING

Code	Composition %									Melt. Range	Tensile Strength	Brinell Hardness	DIN Reference
	Cu	Fe	Ag	Ni	Al	Mn	Sn	Si		°C	Kg/mm ²		
Cu99.9	99.9								P	1080	22	50	SF-Cu
CuSn	Bal					X	0.8	X		1020-1050	22	60	SG-CuSn
CuAg	Bal		1						P	1060-1080	20	60	SG-CuAg
CuSi2Mn	Bal					1	X	2		1030-1050	28	62	
CuSi3	Bal					1		3		910-1025	35	80	SG-CuSi3
CuSn6	Bal						6		P	910-1040	26	80	SG-CuSn6
CuSn12	Bal						12		P	825-990	35	120	SG-CuSn12
CuAl8	Bal				8					1030-1040	43	100	SG-CuAl8
CuAl8Ni2	Bal	2		2	8	2				1030-1050	53	140	SG-CuAlNi2
CuAl9Fe	Bal	1			9					1030-1040	50	110	SG-CuAl10Fe
CuMn13Al8	Bal	2.5		2	8	13				945-985	90	290	SG-CuMn13Al7
CuNi30Fe	Bal	X		31		1			Ti	1180-1240	44	115	SG-CuNi30Fe