

BROOKSIDE METAL COMPANY LTD.

TIN BRONZE

NATIONALITY	ALLOY DESIGNATION	Cu	Sn	Pb	Zn	Fe	Ni	P	Al	Si	Sb	Mn	S	As	TOTAL IMPURITIES
EUROPEAN	BS EN 1982:1999 CuSn10-B (CB480K)	88.5-90.5	9.3-11.0	0.8 MAX.	0.5 MAX.	0.15 MAX.	1.8 MAX.	0.05 MAX.	0.01 MAX.	0.01 MAX.	0.15 MAX.	0.10 MAX.	0.04 MAX.	-	
EUROPEAN	BS EN 1982:1999 CuSn11P-B (CB481K))	87.0-89.3	10.2-11.5	0.25 MAX.	0.05 MAX.	0.10 MAX.	0.10 MAX.	0.6-1.0	0.01 MAX.	0.01 MAX.	0.05 MAX.	0.05 MAX.	0.05 MAX.	-	
EUROPEAN	BS EN 1982:1999 CuSn11Pb2-B (CB482K)	83.5-86.5	10.7-12.5	0.7-2.5	2.0 MAX.	0.15 MAX.	2.0 MAX.	0.05 MAX.	0.01 MAX.	0.01 MAX.	0.20 MAX.	0.2 MAX.	0.08 MAX.	-	
U.K.	BS 1400 1985 PB1	BAL.	10.2-11.5	0.25 MAX.	0.05 MAX.	0.10 MAX.	0.10 MAX.	0.60-1.0	0.01 MAX.	0.02 MAX.	0.05 MAX.	0.04 MAX.	0.05 MAX.	-	0.60
U.K.	BS 1400 1985 CT1	BAL.	9.2-11.0	0.25 MAX.	0.05 MAX.	0.15 MAX.	0.25 MAX.	0.05 MAX.	0.01 MAX.	0.02 MAX.	0.02 MAX.	0.02 MAX.	0.05 MAX.	-	0.80 MAX.
GERMANY	DIN 17656 1973 GB CuSn10	88.5-90.5*	9.3-11.0	0.8 MAX.	0.50 MAX.	0.15 MAX.	1.8 MAX.	0.05 MAX.	0.01 MAX.	0.01 MAX.	0.15 MAX.	0.10 MAX.	0.04 MAX.	0.10 MAX.	0.80 MAX.EXCL. Ni+Sb+P
DENMARK	DS 3001 5443 1978	88.0-90.8*	9.3-11.0	0.8 MAX.	0.5 MAX.	0.15 MAX.	2.0 MAX.	0.05 MAX.	0.01 MAX.	0.01 MAX.	0.2 MAX.	0.2 MAX.	0.05 MAX.	-	
NORWAY	NS 16 510 1977	86.0-88.5	9.3-11.0	0.8 MAX.	0.5 MAX.	0.15 MAX.	2.0 MAX.	0.05 MAX.	0.01 MAX.	0.01 MAX.	0.2 MAX.	0.2 MAX.	0.05 MAX.	-	
SWEDEN	SIS 14 5443 1977	88.0-90.8	9.3-11.0	0.8 MAX.	0.5 MAX.	0.15 MAX.	2.0 MAX.	0.05 MAX.	0.01 MAX.	0.01 MAX.	0.2 MAX.	0.2 MAX.	0.05 MAX.	-	
U.S.A.	ASTM B30 C90700	88.0-90.0*	10.3-12.0	0.50 MAX.	0.50 MAX.	0.15 MAX.	0.50 MAX.	0.30 MAX.	0.005 MAX.	0.005 MAX.	0.10 MAX.	-	-	-	TOTAL OTHERS 0.30 MAX. Pb+Zn+Ni 1.0 MAX.
EUROPEAN	BS EN 1982:2008 CuSn12-B (CB483K)	85.5-88.5	11.2-13.0	0.6 MAX	0.4 MAX	0.15 MAX.	2.0 MAX.	0.20 MAX	0.01 MAX.	0.01 MAX.	0.15 MAX.	0.2 MAX.	0.05 MAX.		
EUROPEAN	BS EN 1982:1999 CuSn12Ni2-B (CB484K)	84.0-87.0	11.3-13.0	0.2 MAX	0.3 MAX	0.15 MAX.	1.5-2.4	0.05 MAX.	0.01 MAX.	0.01 MAX.	0.05 MAX.	0.10 MAX.	0.04 MAX.		
U.K.	BS 1400 1985 PB2	BAL.	11.2-13.0	0.50 MAX.	0.30 MAX.	0.10 MAX.	0.50 MAX.	0.25-0.6	0.01 MAX.	0.02 MAX.	-	-	0.1 MAX.	-	0.20 MAX.EXCL. Ni+Zn+Pb
GERMANY	DIN 17656 1973 GB CuSn12	86.0-88.0*	11.3-13.0	0.8 MAX.	0.50 MAX.	0.15 MAX.	1.8 MAX.	0.05 MAX.	0.01 MAX.	0.01 MAX.	0.15 MAX.	0.10 MAX.	0.04 MAX.	0.10 MAX.	0.8 MAX.EXCL. Ni+Sb+P
GERMANY	DIN 17656 1973 GB CuSn12Ni	84.0-87.0*	11.3-13.0	0.15 MAX.	0.30 MAX.	0.15 MAX.	1.5-2.4	0.05 MAX.	0.01 MAX.	0.01 MAX.	0.05 MAX.	0.10 MAX.	0.04 MAX.	0.10 MAX.	0.5 MAX. EXCL.p+Sb.
DENMARK	DS 3001 5465 1978	85.5-88.3	11.3-13.0	0.8 MAX.	0.5 MAX.	0.15 MAX.	1.8 MAX.	0.05 MAX.	0.01 MAX.	0.01 MAX.	0.1 MAX.	-	0.05 MAX.	-	
NORWAY	NS 16 508 1977	85.5-88.3	11.3-13.0	0.8 MAX.	0.5 MAX.	0.15 MAX.	1.8 MAX.	0.05 MAX.	0.01 MAX.	0.01 MAX.	0.2 MAX.	0.2 MAX.	0.05 MAX.	-	
SWEDEN	SIS 14 5465 1977	85.5-88.3	11.3-13.0	0.8	0.5 MAX.	0.15 MAX.	1.8 MAX.	0.05 MAX.	0.01 MAX.	0.01 MAX.	0.2 MAX.	0.2 MAX.	0.05 MAX.	-	ALT. Si 0.01 MAX.
ITALY	UNI 7013-72-2A G CuSn12	BAL.	11.0-13.00	1.0 MAX.	0.50 MAX.	0.20 MAX.	0.70 MAX.	0.05 MAX.	0.01 MAX.	0.02 MAX.	0.20 MAX.	0.20 MAX.	0.10 MAX.	-	EXCLUDING Ni+P 1.5 MAX. Bi 0.01 MAX.
FRANCE	NF A53-707 1987 CuSn12P	BAL.*	11.0-13.0	1.0 MAX.	1.0 MAX.	0.20 MAX.	2.0 MAX.	0.05-0.40	0.01 MAX.	0.01 MAX.	-	-	0.05 MAX.	-	1.2 MAX.
FRANCE	NF A53-707 1987 CnSn14	83.5 MIN.**	12.5 MIN.	-	1.0 MAX.	-	-	-	-	-	0.5 MAX.	-	-	-	1.5 MAX.

*NICKEL MAY COUNT AS COPPER

** Cu₂Cu+Sn = 0.85-0.87