

BROOKSIDE METAL COMPANY LTD.

HIGH GRADE GUNMETALS

NATIONALITY	ALLOY DESIGNATION	Cu	Sn	Pb	Zn	Fe	Ni	P	Al	Si	As	Mn	S	Sb	TOTAL IMPURITIES
U.K.	BS 1400 1985 G1 1 1/2	BAL.	9.7-10.5	1.5 MAX	1.75-2.75	0.15 MAX.	1.0 MAX.	0.02 MAX.	0.01 MAX.	0.02 MAX.	-	-	0.1 MAX.	-	0.5 MAX . Bi 0.03 MAX Fe+As+Sb 0.20 MAX.
GERMANY	DIN 17656 1973 GB CuSn10Zn (RG 10)	86.0-88.5*	9.2-11.0	1.3 MAX.	1.0-3.0	0.20 MAX.	1.8 MAX.	0.03 MAX.	0.01 MAX.	0.01 MAX.	0.10 MAX.	0.10 MAX.	0.06 MAX.	0.25 MAX.	0.4 MAX. EXCL Ni+Sb.
U.S.A.	ASTM B30 C90500	86.0-89.0	9.0-11.0	0.30 MAX	1.0-3.0	0.20 MAX.	1.0 MAX.	0.05 MAX.	0.005 MAX.	0.005 MAX.	-	-	0.06 MAX.	0.20 MAX.	0.30 MAX. Ni INCLUDES Cu.
DENMARK	DS 3001 5458 1978	86.0-88.5*	9.3-11.0	1.3 MAX.	1.0-3.0	0.20 MAX.	2.0 MAX.	0.03 MAX.	0.01 MAX.	0.01 MAX.	-	0.2 MAX.	0.10 MAX.	0.3 MAX.	
NORWAY	NS 16 512 1977	86.0-88.5	9.0-11.0	1.3 MAX.	1.0-3.0	0.20 MAX.	0.8 MAX.	0.05 MAX.	0.01 MAX.	0.01 MAX.	0.10 MAX.	0.10 MAX.	0.05 MAX.	0.30 MAX.	
SWEDEN	SIS 14 5458 1977	86.0-8.85*	9.3-11.0	1.3 MAX.	1.0-3.0	0.20 MAX.	2.0 MAX.	0.03 MAX.	0.01 MAX.	0.01 MAX.	-	0.2 MAX.	0.10 MAX.	0.03 MAX.	
ITALY	UNI 7013-72-6A G CuSn10Zn2	BAL.	8.50-11.0	1.30 MAX.	1.0-3.0	0.20 MAX.	1.00 MAX.	0.05 MAX.	0.01 MAX.	0.02 MAX.	-	-	0.10 MAX.	0.30 MAX.	TOTAL IMPS. EXCLUDING Ni+P 2.00 MAX.
FRANCE	NF A53-707 1987 CuSn8	BAL.	7.0-9.0	0.5-3.0	3.0 MAX.	0.20 MAX.	1.5 MAX.	-	0.01 MAX.	0.01 MAX.	-	-	0.10 MAX.	-	1.0 MAX.
DENMARK	DS 3001 5456 1978	84.5-86.5	9.3-11.0	1.0-2.0	2.0-4.0	0.25 MAX.	2.0 MAX.	0.03 MAX.	0.01 MAX.	0.01 MAX.	-	0.10 MAX.	0.06 MAX.	0.30 MAX.	

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NATIONALITY	ALLOY DESIGNATION	Cu	Sn	Pb	Zn	Fe	Ni	P	Al	Si	As	Sb	Mn	S	TOTAL IMPURITIES
EUROPEAN	BS EN 1982:2008 CuSn7Zn2Pb3-B (CB492K)	85.0-88.5	6.2-8.0	2.7-3.5	1.7-3.2	0.20 MAX.	2.0 MAX.	0.03 MAX.	0.01 MAX.	0.01 MAX.		0.25 MAX.		0.08 MAX.	
EUROPEAN	BS EN 1982:2008 CuSn7Zn4Pb7-B (CB493K)	81.0-84.5	6.2-8.0	5.2-8.0	2.3-5.0	0.20 MAX.	2.0 MAX.	0.03 MAX.	0.01 MAX.	0.01 MAX.		0.30 MAX.		0.08 MAX.	
EUROPEAN	BS EN 1982:2008 CuSn6Zn4Pb2-B (CB498K)	86.0-89.5	5.7-6.5	1.2-2.0	3.2-5.0	0.25 MAX.	1.0 MAX.	0.03 MAX.	0.01 MAX.	0.01 MAX.		0.25 MAX.		0.08 MAX.	
U.K.	BS 1400 1985 LG4	BAL.	6.0-8.0	2.7-3.5	1.7-3.2	0.2 MAX.	2.0 MAX.	0.02 MAX.	0.01 MAX.	0.01 MAX.	0.15 MAX.	0.25 MAX.	-	0.1 MAX.	0.70 MAX. Fe+As+Sb 0.40 MAX. Sn+1/2 Ni CONTENT MIN 7%
U.K.	BS 1400 1985 LPB1	BAL.	6.5-8.5	2.0-3.8	2.0 MAX.	0.2 MAX.	1.0 MAX.	0.4 MIN.	0.01 MAX.	0.01 MAX.	-	0.25 MAX.	-	0.1 MAX.	0.50 MAX.
GERMANY	DIN 17656 1973 GB CuSn6ZnNi (RG6)	83.5-87.0*	5.8-7.0	2.8-4.0	1.8-3.0	0.20 MAX.	1.5-2.3	0.03 MAX.	0.01 MAX.	0.01 MAX.	0.01 MAX.	0.20 MAX.	0.10 MAX.	0.06 MAX.	0.4 MAX. EXCL. Sb.
GERMANY	DIN 17656 1973 GB CuSn7ZnPb (RG7)	81.0-84.5*	6.3-8.0	5.3-7.0	3.3-5.0	0.20 MAX.	1.8 MAX.	0.03 MAX.	0.01 MAX.	0.01 MAX.	0.10 MAX.	0.25 MAX.	0.10 MAX.	0.06 MAX.	0.4 MAX. EXCL. Sb+Ni.
U.S.A.	ASTM B30 C93200 (SAE 660)	81.0-85.0*	6.3-7.5	6.0-8.0	2.0-4.0	0.20 MAX.	1.0 MAX.	0.15 MAX.	0.005 MAX.	0.005 MAX.	-	0.35 MAX.	-	-	TOTAL OTHERS 0.20 MAX. Ni INCLUDES C.
U.S.A.	ASTM B30 C92200	86.0-90.0*	5.8-6.5	1.0-1.8	3.5-5.0	0.20 MAX.	0.8 MAX.	0.03 MAX.	0.005 MAX.	0.005 MAX.	-	0.20 MAX.	-	0.05 MAX.	TOTAL OTHERS 0.30 MAX. Ni INCLUDES C
ITALY	UNI 7013-72-7A G CuSn7Zn4Pb6	BAL.	6.0-8.0	5.0-7.0	3.0-5.0	0.25 MAX.	2.0 MAX.	0.05 MAX.	0.01 MAX.	0.02 MAX.	-	0.35 MAX.	0.10 MAX.	0.10 MAX.	TOTAL EXCLUDING Ni+P 0.70 MAX.
DENMARK	DS 3001 1978 5426	82.0-84.0	6.3-8.0	5.3-7.0	2.3-5.0	0.20 MAX.	2.0 MAX.	0.03 MAX.	0.01 MAX.	0.01 MAX.	-	0.30 MAX.	-	0.06 MAX.	
FRANCE	NF A53-707 1987 CuSn7Pb6Zn4	BAL.	6.0-8.0	5.0-7.0	2.0-5.0	0.20 MAX.	1.5 MAX.	-	0.01 MAX.	0.01 MAX.	-	-	-	0.10 MAX.	1.0 MAX.
NORWAY	NS 16 525 1977	82.0-84.0	6.3-8.0	5.3-7.0	2.3-5.0	0.20 MAX.	2.0 MAX.	0.03 MAX.	0.01 MAX.	0.01 MAX.	-	0.30 MAX.	-	0.06 MAX.	Al+Si 0.01 MAX.
NORWAY	NS 16 532 1977	83.5-87.0	5.8-7.0	2.8-4.0	1.8-3.0	0.20 MAX.	1.5-2.3	0.03 MAX.	0.01 MAX.	0.01 MAX.	-	0.20 MAX.	0.10 MAX.	0.06 MAX.	0.4 MAX. Al+Si 0.01 MAX.
NORWAY	NS 16 520 1977	83.5-85.5	8.3-10.0	1.5-3.0	3.5-5.5	0.25 MAX.	2.0 MAX.	0.03 MAX.	0.01 MAX.	0.01 MAX.	0.10 MAX.	0.30 MAX.	0.10 MAX.	0.06 MAX.	0.4 MAX. Al+Si 0.01 MAX.
DENMARK	DS 3001 1978 5445	83.5-85.5	8.3-10.0	1.5-3.0	3.5-5.5	0.25 MAX.	2.0 MAX.	0.03 MAX.	0.01 MAX.	0.01 MAX.	-	0.30 MAX.	0.10 MAX.	0.06 MAX.	0.4 MAX EXCLUDING Ni+Sb
SWEDEN	SIS 14 5444 1977 (RG9)	85.0-87.0	8.5-10.0	2.0-4.0	1.5-2.5	0.2	0.75	0.03	0.01	0.01	0.15	0.3	0.1	0.06	Al+Si 0.01 MAX.

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