Table 13: Copper and Copper Alloys for Welding and Braze Welding - Composition and Melting Ranges (EN 13347)

Material Designation		Composition, %, Range or Max											Nearest Old BS Equivalent			Equivalent in EN 1044 (2)	Melting Range °C
Symbol	Number	Cu	Al	Fe	Mn	Ni	P	Pb	Si	Sn	Zn	Others Total	1453	1845	2910		
Coppers																	
Cu-ETP	CF004A	99.90 min	0.0005 Bi, 0.005 Pb, Total 0.03 max excl. Ag, O(1)													Cu101	1085
Cu-OF	CF008A	99.90 min	0.0005 Bi, 0.005 Pb, Total 0.03 max excl. Ag, (1)											Cu3		Cu102	1085
Cu-DHP	CF024A	99.90 min					0.015-0.040							Cu6		Cu104	1085
Miscellaneous Copper Alloys																	
CuMnSi	CF132C	Rem.	0.03	0.03	0.1-0.4	0.1	0.015	0.01	0.1-0.4	0.1		0.2			C7		
CuSn1MnSi	CF133C	Rem.	0.03	0.03	0.1-0.4	0.1	0.015	0.01	0.1-0.4	0.5-1.0		0.2			C7		
CuSi3Mn1	CF116C	Rem.	0.05	0.2	0.7-1.3		0.05	0.05	2.7-3.2		0.4	0.5			C9		
CuMn13Al6Fe2Ni2	CF239E	72.0-78.0	5.5-6.5	1.5-2.5	9.0-14.0	1.5-2.5		0.02	0.2		0.2	0.5					
Copper-phosphorus																	
CuP8	CF222E	Rem.	0.01				7.5-8.1	0.025			0.05	0.03 Bi 0.025 Cd 0.25				CP201	710-770
Copper-zinc																	
CuZn40Si	CF724R	58.5-61.5	0.01	0.25				0.02	0.2-0.4	0.2	Rem.	0.2	C2	CZ6		Cu301	875-895
CuZn40SiSn	CF725R	58.5-61.5	0.01	0.25				0.02	0.2-0.4	0.2-0.5	Rem.	0.2	C2	CZ6A		Cu302	875-895
CuZn40MnSi	CF726R	58.5-61.5	0.01	0.25	0.05-0.25			0.02	0.15-0.4	0.2	Rem.	0.2		CZ7		Cu303	870-900
CuZn40MnSiSn	CF727R	58.5-61.5	0.01	0.25	0.05-0.25			0.02	0.15-0.4	0.2-0.5	Rem.	0.2		CZ7A		Cu304	870-900
CuZn39Mn1SiSn	CF728R	59.0-61.0	0.05	0.05	0.05-1.0			0.02	0.15-0.40	0.2-0.5	Rem.	0.2					
CuZn37Si	CF729R	62.6-63.5	0.02	0.05	0.02	0.3		0.05	0.1-0.2	0.05	Rem.	0.2					
CuZn40Sn1	CF730R	57.0-61.0	0.02	0.2	0.01			0.05	0.2	0.25-1.0	Rem.	0.2					
CuZn40Sn1MnNiSi	CF731R	56.0-62.0	0.01	0.25	0.2-1.0	0.5-1.5		0.02	0.1-0.5	0.5-1.5	Rem.	0.2				Cu306	870-890
CuZn40Fe1Sn1MnSi	CF732R	56.0-60.0	0.01	0.25-1.2	0.01-0.5			0.05	0.04-0.15	0.8-1.1	Rem.	0.2	C2C				
CuZn39Fe1Sn1MnNiSi	CF733R	56.0-60.0	0.01	0.25-1.2	0.01-0.5	0.2-0.8		0.05	0.04-0.15	0.8-1.1	Rem.	0.2	C2B				
CuZn40FeSiSn	CF734R	58.5-61.5	0.02	0.1-0.5	0.05-0.25			0.03	0.15-0.3	0.2-0.5	Rem.	0.2	C4				
Copper-tin																	
CuSn5	CF451K	Rem.		0.1		0.2	0.01-0.4	0.02		4.5-5.5	0.2	0.2			C10		
CuSn6	CF452K	Rem.		0.1		0.2	0.01-0.4	0.02		5.5-7.0	0.2	0.2			C11	Cu201	910-1040
CuSn8	CF453K	Rem.		0.1		0.2	0.01-0.4	0.02		7.5-8.5	0.2	0.2					
CuSn12	CF461K	Rem.	0.005				0.01-0.4	0.02		11.0-13.0	0.05	0.025 Cd 0.4				Cu202	825-990
Copper-aluminium																	
CuAl8	CF309G	Rem.	7.0-9.0	0.5	0.5	0.5		0.02	0.2	0.1	0.2	0.2					
CuAl10Fe1	CF305G	Rem.	9.0-10.0	0.5-1.5	0.5	1.0		0.02	0.2		0.5	0.2			C13		
CuAl6Si2Fe	CF301G	Rem.	6.0-6.4	0.5-0.7	0.1	0.1		0.02	2.0-4.0	0.1	0.4	0.2			C23		
CuAl9Ni4Fe3Mn2	CF310G	Rem.	8.5-9.5	2.5-4.0	1.0-2.0	3.5-5.5		0.02	0.1		0.2	0.2			C20		
Copper-nickel-zinc																	
CuNi10Zn42	CF411J	46.0-50.0	0.01	0.25	0.2	8.0-11.0		0.02	0.15-0.4	0.2	Rem.	0.2				Cu305	890-920

Notes:

(1) Ag, As, Bi, Cd, Co, Cr, Fe, Mn, Ni, O, P, Pb, S, Sb, Se, Si, Sn, Te, Zn

(2) EN 1044 Brazing - filler metals