

Extruded or Cast and Drawn Product Chemical Composition

Copper Alloy UNS No.	ASTM Spec	AMS Spec	Product Description	Cu%	Pb%	Sn%	Zn%	Fe%	P%	Ni%	Al%	Co%	Cr%	Mn%	Si%	As%	Te%
C14500	B301		Tellurium Copper	99.90 min ³					0.004- 0.012								0.40- 0.70
C23000	B927		Red Brass 85%	84.00- 86.00	0.05		Rem.	0.05									
C24000	B927		Low Brass 80%	78.50- 81.50	0.05		Rem.	0.05									
C26000	B927		Cartridge Brass 70%	68.50- 71.50	0.07		Rem.	0.05									
C31400	B140		Leaded Commercial Bronze	87.50- 90.50	1.30- 2.50		Rem.	0.10		0.70							
C31600	B140		Leaded Commercial Bronze (nickel-bearing)	87.50- 90.50	1.30- 2.50		Rem.	0.10	0.04- 0.10	0.70- 1.20							
C51000	B139	4625	Phosphor Bronze 5% A	Rem.	0.05	4.20- 5.80	0.30	0.10	0.03- 0.35								
C52100	B139		Phosphor Bronze 8% A	Rem.	0.05	7.00- 9.00	0.20	0.10	0.03- 0.35								
C53400	B139		Phosphor Bronze B-1	Rem.	0.08- 1.20	3.50- 5.80	0.30	0.10	0.03- 0.35								
C54400	B139		Phosphor Bronze B-2	Rem.	3.00- 4.00	3.50- 4.50	1.50- 4.50	0.10	0.01- 0.50								
C62400	B150		Aluminum Bronze 11%	Rem. ¹		0.20		2.00- 4.50			10.00- 11.50			0.30	0.25		
C63000	B150	4640	Nickel-Aluminum Bronze	Rem. ¹		0.20	0.30	2.00- 4.00		4.00- 5.50 ²	9.00- 11.00			1.50	0.25		
C63020	B150	4590	Nickel-Aluminum Bronze	Rem.	0.03	0.25	0.30	4.00- 5.50		4.20- 6.00	10.00- 11.00	0.20	0.05	1.50	0.15		
C64200	B150	4634	Aluminum Bronze	Rem. ¹	0.05	0.20	0.50	0.30		0.25 ²	6.30- 7.60			0.10	1.50- 2.20	0.09	

¹Cu value includes Ag. ²Ni value includes Co. ³Includes tellurium and phosphorus
 Note: Unless otherwise noted, single values represent maximums.

Extruded or Cast and Drawn Product Chemical Composition (continued)

Copper Alloy UNS No.	ASTM Spec	AMS Spec	Product Description	Cu%	Pb%	Sn%	Zn%	Fe%	P%	Ni% ²	Al%	Co%	Cr%	Mn%	Si%	As%	Te%
C64210	B150		Aluminum Silicon Bronze	Rem. ¹	0.05	0.20	0.50	0.30		0.25 ²	6.30-7.60			0.10	1.50-2.00	0.09	
C65100	B98		Low-Silicon Bronze B	Rem. ¹	0.05		1.50	0.80						0.70	0.80-2.00		
C67300 ^f			Manganese Bronze	58.00-63.00 ¹	0.40-3.00	0.30	Rem.	0.50		0.25 ²	0.25			2.00-3.50	0.50-1.50		
C67400 ^f			Manganese Bronze	57.00-60.00	0.50	0.30	Rem.	0.35		0.25 ²	0.50-2.00			2.00-3.50	0.50-1.50		
C67410			Manganese Bronze	55.00-59.00 ¹	0.80	0.50	Rem.	1.00		2.00	1.30-2.30			1.00-2.40	0.70-1.30		
C67600	B138		Manganese Bronze	57.00-60.00 ¹	0.50-1.00	0.50-1.50	Rem.	0.40-1.30						0.05-0.50			
C69400	B371		Silicon Red Bronze	80.00-83.00 ¹	0.30		Rem.	0.20							3.50-4.50		
C69430	B371		Silicon Red Bronze	80.00-83.00 ¹	0.30		Rem.	0.20							3.50-4.50	0.03-0.06	
C72900 ^A		4596	Copper Nickel-Tin Bronze	Rem.	0.02	7.50-8.50	0.50	0.50		14.50-15.50 ²				0.30			
C72900 ^A		4597	Copper Nickel-Tin Bronze	Rem.	0.02	7.50-8.50	0.50	0.50		14.50-15.50 ²				0.30			
C72900 ^A		4598	Copper Nickel-Tin Bronze	Rem.	0.02	7.50-8.50	0.50	0.50		14.50-15.50 ²				0.30			

¹SAE J463 specification. ¹Cu value includes Ag. ²Ni value includes Co. ^AChemical requirements for other elements: Cb 0.10%, max and Mg 0.15%, max.
 Note: Single values represent maximums.