

C94000

Continuous cast

Product description	High-leaded tin bronze
Solids	1" to 10" O.D.
Tubes	1" to 16" O.D.
Rectangles	Up to 10"
Standard lengths	144"
Shape/form	Semi-finished, mill stock or near-net shapes, anode, bar stock, billet/bloom, squares, hex, plate, profile or structural shape, flats/rectangular bar

Typical uses

Industrial

High-speed bearings for light loads, high-speed/light-to-medium-pressure bushings, soft bushings, railroad applications, soft metal applications

Similar or equivalent specification

CDA	ASTM	SAE	AMS	Federal	Military	Other
C94000	B505 B505M	J461 J462		QQ-C-390, E2 QQ-B-1005, Comp 13	MIL-B-11553, Comp 13	

Chemical composition

Cu (%)	Pb (%)	Sn (%)	Zn (%)	Fe (%)	P (%)	Ni (%) ¹	Al (%)	S (%) ²	Sb (%)	Si (%)
69.00-72.00	14.00-16.00	12.00-14.00	0.50	0.25	1.50	0.50-1.00	0.005	0.25	0.50	0.005

Chemical composition according to ASTM B505/B505M-23

¹Ni value includes Co. ²For continuous castings, S shall be 0.25% max.
Note: Cu + sum of named elements, 98.7% min. Single values represent maximums.

Machinability

Copper alloy UNS no.	Machinability rating	Density (lb/in ³ at 68° F)
C94000	80	0.334

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Mechanical properties

Tensile strength, min		Yield strength, at 0.5% extension under load, min		Elongation, in 2 in. or 50 mm, min	Brinell hardness (500 kg load)	Remarks
ksi	MPa	ksi	MPa	%	typical BHN	
					80	

Mechanical properties according to ASTM B505/B505M-23