C94100

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

Thrust block

Similiar or equivalent specification						
CDA	ASTM	SAE	AMS	Federal	Military	Other
C94100	B505 B505M			QQ-C-390, E5	MIL-B-16261, Grade X	

Chemical composition										
Cu (%)	Pb (%)	Sn (%)	Zn (%)	Fe (%)	P (%)	Ni (%)[1]	Al (%)	S (%)[2]	Sb (%)	Si (%)
72.00-79.00	18.00-22.00	4.50-6.50	1.00	0.25	1.50	1.00	0.005	0.25	0.80	0.005

Chemical composition according to ASTM B505/B505M-23

[1]Ni value includes Co. [2]For 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 $^\circ$F)
C94100	80	0.336

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	
25	172	17	117	7	50	

Mechanical properties according to ASTM B505/B505M-23