

# C94100

Cast

<b>Product Description:</b>	High-Leaded Tin Bronze
<b>Solids:</b>	½" to 10" OD
<b>Tubes:</b>	1" to 16" OD
<b>Rectangles:</b>	Up to 10"
<b>Standard Lengths:</b>	144"
<b>Shape/Form:</b>	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

## Similar or Equivalent Specification

CDA	ASTM	ASARCON	SAE	AMS	FEDERAL	MILITARY	OTHER
C94100	B505 B505M	520			QQ-C-390, E5	MIL-B-16261, GRADE X	

## Chemical Composition

Cu%	Pb%	Sn%	Zn%	Fe%	P% <sup>1</sup>	Ni% <sup>2</sup>	Al%	S% <sup>3</sup>	Sb%	Si%
72.00- 79.00	18.00- 22.00	4.50- 6.50	1.00	0.25	0.50	1.00	0.005	0.08	0.80	0.005

Chemical Composition according to ASTM B505/B505M-14

<sup>1</sup>For continuous castings, P shall be 1.5% max.

<sup>2</sup>Ni value includes Co.

<sup>3</sup>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/cu in at 68° F)
C94100	80	0.336



# Mechanical Properties

C94100 continued

Tensile Strength, min		Yield Strength, at .5% extension under load min		Elongation, in 2 in. or 50 mm min	Brinell Hardness	Remarks
ksi	MPa	ksi	MPa	%	typical BHN	
25	172	17	117	7	50 (500 kg)	

Mechanical Properties according to ASTM B505/B505M-14

