

Product Information Sheet

ISSUE A

ALLOY C94100 (EMS 403)

A. W. Fraser Alloy 941 (EMS 403) is a high leaded tin bronze which conforms to the requirements of ASTM B505 - C94100.

This alloy has excellent bearing qualities and good corrosion resistance.

Alloy C94100 is suitable for moderately loaded bearings with low working temperature and low impact loading or pounding. It will withstand doubtful lubrication for short periods. Adequate backing for bearings must be provided.

The micrograin casting techniques used in the manufacture of this alloy ensure good lead dispersion and small particle size with lead globules typically less than 120 μ " (.005").

ALLOY C94100 - HIGH LEAD TIN BRONZE	SUMMARY OF PROPERTIES
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Chemical Composition - percent

Element		
Copper	Cu	Remainder
Tin	Sn	5.0 - 7.0
Lead	Pb	17.0 - 22.0
Zinc	Zn	1.0 maximum
Nickel	Ni	0.5 maximum
Antimony	Sb	0.7 maximum
Total Impurities		0.3 maximum

Mechanical Properties [Typical]

Tensile Strength
Elongation
Hardness

Continuous Cast

160 MPa (23,000 psi)
7% minimum
55 BHN (Brinell 500Kg)

Specific Gravity

9.2

Comparative Specifications

BS1400 - LB5*; AS1656 - C94100

* Similar but not identical