

DATA SHEET:

Lead tin bronze: EN 1982: CuSn5Pb20-C (CC497K) (LTP120)

Correspondence of Standards: DIN EN 1982 CuSn5Pb20-C, UNS C 94300, BS 1400 LB5

Typical mechanical properties: (GZ=Centrifugal casting, GC=Continuous casting)

Min values	0,2 %-proof strength N/mm ²	Tensile strength N/mm ²	Elongation A %	Hardness HB
GZ	80	170	6	50
GC	90	180	7	50

Fysikaaliset ominaisuudet:

Density kg/dm	Coefficient thermal expansion 10 ⁻⁶ x 1/K	Thermal conductivity W/Km	Resistivity nΩm
9,4	18,5	40	120

Corrosion resistance: (Relative scale for copper alloys: 1 – 5, where 5 means best resistance)

Air, fresh water	Sea water	Soap solution, alcalic	Weak acids	Strong nonoxidizing acids
5	4	4	4	2

Nominal composition %:

	Cu	Sn	Pb	Zn	Ni	P	Fe	Si	Mn	Al	S	Sb
min.	70,0	4,0	18,0	-	0,5	-	-	-	-	-	-	-
max.	78,0	6,0	23,0	2,0	2,5	0,10	0,25	0,01	0,20	0,01	0,10	0,75

Recommended use:

Soft leaded tin bronze has the best sliding and emergency lubrication properties. It adapts well to edge pressure. Its friction coefficient is small with dry friction and it is best applicable in water lubricated bearings. Because it is relatively soft and plastic metal, it can absorb strange, hard particles, which otherwise would damage the shaft. It is very resistant to the corrosive effect of sulphuric acid. Excellent machinability.

USE

For use in bearings of big, rotating reel ovens like pulp burning and cement ovens. For use in bearings of the heaviest earth moving machines, in insufficiently lubricated or water lubricated bearings in barking plant conveyors and similar. It can also be used in bearings where white metals were used earlier. CuSn5Pb20-C-GC/GZ - PROMET 420 - endures about 100 degrees higher temperature than white metal. It is also used in fixtures that are resistant to corrosion.

Our customer service advices on material selection for different uses: info@keskipakovalu.fi and phone +358 3 357 9000.