

DATA SHEET:

Gun metal: EN 1982: CuSn5Zn5Pb5-C (CC491K) (RG5)

Correspondence of Standards: DIN 1705 CuSn5ZnPb, UNS C83600, ASTM B 505, BS 1400 LG2

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	110	250	13	65
GC	110	250	13	65

Physical properties:

Density kg/dm	Coefficient thermal expansion 10 ⁻⁶ x 1/K	Thermal conductivity W/Km	Resistivity nΩm
8.9	18	70	110

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	3	1

Nominal composition %:

	Cu	Sn	Pb	Zn	Ni	P	Fe	Si	Mn	Al	S	Sb
min.	83,0	4,0	4,0	4,0	-	-	-	-	-	-	-	-
max.	87,0	6,0	6,0	6,0	2,0	0.10	0.3	0.01	-	0.01	0.10	0,25

Recommended use:

A suitable sliding bearing metal for general use. Resistant to wear and tear, good sliding properties. It adapts to edge pressure better than tin bronzes but not as well as PROMET 420. Emergency lubrication properties are satisfactory. Average surface pressure may rise in a hydrodynamically lubricated bearing, where is not edge pressure to 25 . . . 46 N/mm². PROMET 5 is resistant to sea water and corrosion in general and that is why it is the most economic sliding bearing material.

In corrosion susceptible parts of paper machines, in semiheavily loaded bushings used in general machine building, in cylinder lining bushings, in propeller shaft casings of ships, in seat inserts and in slowly rotating spiral and toothed rims with small surface stress.

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