

Cuprass 3

Chemical Composition	Al	Fe	Mn	Zn	Cu
	3-7	1.5-4	2.5-5	kalan	60-67

Code EN: CC762S, UNS No: C86300

Material Properties It belongs to the manganese bronzes family which possesses characteristics such as resistance to sea water corrosion and ability to absorb vibration. It is a special alloy having a high mechanical strength. Its hardness and tensile strength are high because of the alloying elements it contains. Furthermore, its random corrosion resistance is excellent.

Application Area Ship propellers, bearings, cylinder gears, wedges, connector caps, screws-nuts.

In selection of machines and equipments that are used in constructional and agricultural industries, it must be preferred owing to its high corrosion resistance and good mechanical properties.

It is also an option in ring bearings and lubricated bearings.

Heat Treatment If there is intensive machining, stress relieving is recommended

Mechanical Properties	Hardness	HB	180-225
	Tensile strength	N/mm ²	820
	Yield strength	N/mm ²	460
	Elongation L=5D	%	14
	Modulus of elasticity (20 °C)	GPa	105

Physical Properties	Electrical conductivity	MS/m	5
	Coefficient of thermal expansion (273 - 573 K)	10 ⁻⁶ /K	22
	Thermal conductivity (20 °C)	(W/mK)	36
	Density	(g/cm ³)	7.7
