HOLME DODSWORTH METALS LIMITED
www.holmedodsworth.com

SAE660 / CC493K offers very good machining properties and reasonable strength and hardness levels. The tin and the lead content in the material also enhances the alloys wear resistance and gives excellent anti-friction qualities.

SAE660 / CC493K is not subject to dezincification and offers a reasonable corrosion resistance in seawater and brine. This makes it suitable for pump and valve components bearings and bushings having medium loads and speeds with adequate lubrications.

Related Standards

SAE660	CC493K
C93200	CuSn7Zn4Pb7
2.1090 (RG7)	

Chemical Composition (nominal)

Copper	83.0%
Tin	7.0%
Lead	7.0%
Zinc	3.0%

Mechanical Properties (Minima all sizes Continuous Cast)

UTS	205 N/mm^2
0.2% Proof Strength	100 N/mm^2
Elongation	15%
Hardness	70 HB

Key Features

- High wear resistance
- Excellent Machinability
- Good pressure tightness

Typical Physical Properties

Melting Point	977°C
Density	8.93 g/cm^3
Thermal conductivity (RT)	58 W/m°K
Thermal expansion coefficient (20-200°C)	18 x 10-6 / ^0C
Electrical conductivity	12% IACS
Modulus of Elasticity	100 GPa

Fabrication Properties

Hot Formability	Not Recommended
Cold Formability	Not Recommended
Machinability rating	70%

(free cutting brass = 100)	
Stress Relieving Temp. Range	260°C (1hr per inch thickness)
Maximum operating temperature	230°C

Joining Methods

Soldering	Excellent
Brazing	Good
Oxy-acetylene welding	Not recommended
Gas-shielded arc welding	Not recommended

Typical Uses

General utility bearings, bushings and wear plates and other engineering components requiring good wear resistance and machinability.

This technical information is given by Holme Dodsworth Metals without charge and the user shall employ such information at their own discretion and risk. For more detailed technical advice on temper selection, fabrication, joining, machining, physical and mechanical data please contact us as space does not permit the listing of every feature of the material.