

### TECHNICAL DATA SHEET 20

#### Specifications:

Alloy	Working Temperature (°C)	NF EN ISO 17672	AWS A-5.8	DIN 8513	EN ISO 3677
Cu-Zn	900	Cu 471	~RBCu Zn-C	~L-Cu Zn 40	B-Cu60 Zn(Sn)(Si)(Mn) 870/900

#### Characteristics:

**CUPROX** is basically an alloy of copper and zinc with small addition of silicon, nickel and manganese intended to increase adhesion and to control Zn vaporization. Bare rods are to be used or coated with our **POLYFLUX**. Braze Welding alloy with good flowing properties, Suitable for gap brazing. Being a high Zn content, it is recommended to keep the heating cycle to a minimum to prevent Zinc vaporisation. .

#### Applications:

**CUPROX**, is recommended to be used in lock-smith and workshops. This brazing alloy is also recommended for joining: Steels, Cast irons, Moulded steels, Nickel and Nickel alloys Coppers, Bronze, Brass, Nickel silver, Cupro-aluminium, with it solidus temperature is >900°C. When working with Cast Iron, the work pieces should not be overheated. Typical application are found in the tubular construction industry (Metal furniture, Bicycle frames, radiators & towel., warmers ) mining tools heating and cooling systems, etc...

#### Typical Chemical Compositions (%):

Cu	Zn	Si	Sn	Mn	Ni	Ag	Fe	Al/As	Bi/ Sb /Cd	Pb	Max. impurities
60.00	Balance	0.20	0.40	0.25	<0.02	-	<0.25	<0.01	<0.01	<0.025	<0.20





#### Typical Physical Properties:

Coating Colour	Solidus (°C)	Liquidus (°C)	Density g/cm <sup>3</sup>	Elongation %	Tensile strength (MPa)	Electrical Conductivity (%IACS)	Electrical Resistivity (Micro-ohm-cm)
Customize	870	900	8.40	35%	450	-	-

#### Properties of Brazed Joint:

The properties of a brazed joint dependent upon numerous factors including base metal properties, joint design, metallurgical interactions between the base metal and the filler metal. This alloy needs a controlled quench (in excess of 300°C) to avoid the weakening of the brazed joint.

#### Standard Size , Types & Heat Source Recommendations:

Size (mm)	Type				Type	 OXYACETYLENE	 INDUCTION	 AÉRO-PROPANE	 FOUR/OVEN
	Bare	Coated	Coil	Preforms					
1.50,2.00,2.50,3.00, 4.00, 5.00,	√	√	√	√	Bare	√	√	√	√
					Coated	√	X	X	X

Customised size other than above standard dimensions are solicited case to case basis

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