

CUPROX 681

Braze Welding Alloy

TECHNICAL DATA SHEET 515

Specifications:

Alloy	Working Temperature (°C)	NF EN ISO 17672	AWS A5.8	EN 1044	EN ISO 3677
Cu-Zn	890	Cu 680	RBCuZn-B		B-Cu59Zn(Sn)(Ni)(Mn)(Si)870/890

Characteristics:

CUPROX 681 is basically an alloy of copper and zinc with small addition of Thin, silicon, nickel, manganese and iron 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 681 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	Typical Chemical Compositions (%):											
Cu	Zn	Si	Sn	Mn	Ni	Fe	Al/As	Bi/ Sb /Cd	Pb	Max. impurities		
58.0	Balan	ce 0.1	0 1.0	0.25	8.0	1.2	<0.01	<0.01	<0.025	<0.20		
Typical	Typical Physical Properties:											
Coatir Color	_	Solidus (°C)	' '		ongation Tensile strength (MPa)			Electrical Conductivity (%IACS)		Electrical Resistivity (Micro-ohm-cm)		
Custon	nize	870	890	8.40		-	4	50	-		-	

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)	Туре				Туре		000	*	••••
	Bare	Coated	Coil	Preforms		OXY/ACETYLÈNE	INDUCTION	AÉRO-PROPANE	FOUR/OVEN
1.50,2.00,2.50,3.00,		V	V	V	Bare			√	$\sqrt{}$
4.00, 5.00,					Coated	√	Х	Х	X

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

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