

TECHNICAL DATA SHEET 151

Specifications:

Alloy	Working Temperature (°C)	NF EN ISO 17672 (2016-11)	AWS A-5.8	ISO 3677	AMS
Ag-Cu-Zn-Si	820	Ag212		B-Cu48ZnAg(Si)-800/830	-

Characteristics:

BRAZARGENT 1512Si is a Ternary Cd free alloy which main elements are: Copper, Zinc, Silver (12%) and Silicon. Silver and Zinc contents lowers the melting point. This viscous alloy is suitable to join most Ferrous and Non-Ferrous metals with the notable exception of Aluminium and Magnesium. Its low fluidity makes it suitable in joint configurations where the fit up is poor. It has good fillet-forming capabilities. Due to high melting alloy it is recommended for step brazing techniques. The recommended joint gap will be 0.075 to 0.20mm. The high temperature flux coating improves the alloy flow profile.

The rods are available in bare rods (to be used with ours **BORINOX** or **POLYFLUX**) or in coated rods.

Applications:

BRAZARGENT 1512Si can be used for brazing ferrous metal and Steels, It can be recommended for brazing Copper and Copper based alloys. Alloy has an application in Refrigeration and Air conditioning industry, Plumbing Technology. Operating temperature for brazed joint is approx. -200°C to +200°C (without loss in strength).

Typical Chemical Compositions (%):

Ag	Cu	Zn	Si	Al	Bi	Cd	P	Pb	Max impurities
12.00	48.00	39.70	0.20	<0.001	<0.03	<0.01	<0.008	<0.025	<0.15





Typical Physical Properties:

Colour	Solidus (°C)	Liquidus (°C)	Density g/cm ³	Elongation %	Tensile strength (MPa)	Electrical Conductivity (%IACS)	Electrical Resistivity (Micro-ohm-cm)
Silver	800	830	8.40	17 %	390	-	-

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.

Standard Size, Types and Heat Source Recommendations:

Size Ø (mm) x 500	Type						 OXY/ACETYLENE	 INDUCTION	 AERO-PROPANE	 FOUR/OVEN
	Bare	Coated	TBW	Coil/Spool	Preforms					
Ø 1.5 to 3.0	√	√	X	√	√	Bare	√	√	√	√
						Coated	√	X	√	X

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