BRAZARGENT 3049+

Cadmium Free Silver Brazing Alloy

TECHNICAL DATA SHEET

Specifications:

Alloy	Working Temperature (˚C)	NF EN ISO 17672	AWS A-5.8	DIN 8513	EN ISO 3677	AMS
Ag-Cu-Zn-Mn-Ni	700	Ag449	BAg-22	L-Ag-49	B-Ag49ZnCuMnNi-680-705	-

Characteristics:

BRAZARGENT 3049+ very widely used Cd free alloy which main elements are: Copper, Zinc, Mn, Ni and high silver content at 49%. Ni & Mn improves the alloy wettability and bonding strength with Tungsten Carbides. These additions are particularly recommended when brazing alloy difficult to wet carbides and those are low cobalt and additions of Tantalum and Titanium carbides. This range has been developed to replace cadmium-bearing brazing alloys, where the use of Cd is forbidden. Lap joints are recommended. The filler metal will fill the gaps between 0.10-0.25mm and can accommodate stresses that generate during cooling due to different coefficient of thermal expansions, (better than Tin bearing alloy). Also offer good corrosion resistance and is non-toxic enabling properties. The rod is coated with our **AG Flux** or **Borinox Flux**.

Applications:

BRAZARGENT 3049+ is used for brazing Tools of Tungsten Carbides to Steels component, It can be used to braze Cast Iron. Operating temperature of brazed joint approx. -200°C to +200°C (without loss in strength)

Typical Chemical Compositions (%):

Ag	Cu	Zn	Mn	Ni	Al	Cd	P	Pb	Max. impurities
49.00	16.00	23.00	7.5	4.5	<0.001	<0.01	<0.008	<0.025	<0.30

Typical Physical Properties:

Coating Colour	Solidus (˚C)	Liquidus (˚C)	Density g/cm³	Elongation %	Tensile strength (MPa)	Electrical Conductivity (%IACS)	Electrical Resistivity (Micro-ohm-cm)
Customize	680	705	9.10	-	≥ 300	5.70	30.20

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	OXY/ACETYLÈNE	INDUCTION	AÉRO-PROPANE	FOUR/OVEN
	Bare	Coated	Coil	Preforms					
1.50,2.00,2.50,3.00	√	√	–	√	Bare	√	√	√	√
					Coated	√	X	√	√

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