BRAZARGENT 5038

(Bare rods / Coated rods / TBW)

Cadmium Free Silver (38%) Brazing Alloy

TECHNICAL DATA SHEET 245

Specifications:

Alloy	Working Temperature (˚C)	NF EN ISO 17672 (2016-11)	AWS A-5.8	DIN 8513	EN ISO 3677	AMS
Ag-Cu-Zn-Sn	690	Ag 138Si	BAg-34		B-Ag38CuZnSn(Si)-650/720	-

Characteristics:

BRAZARGENT 5038 is a Cd free alloy which main elements are: Copper, Zinc, Silver (38%) and Tin. Silver and Tin contents lowers the melting point, increases fluidity and exhibits good wetting properties. Its excellent fluidity makes it suitable in closely fitting joints as able to penetrate tight gaps. This Brazargent 5038 alloy offers good performance in terms of operating, and makes it suited for delicate assemblies with tight clearances. Offers good mechanical properties and corrosion resistance.

The rods are available in bare rods to be used with ours **AGFLUX/ Paste**, in coated rods (**AGFLUX or HP Flux**) and also available in **TBW** (Tubular Brazing Wire). This technology (Flux inside) offers a great efficiency in terms of application and control to metal/flux ratio (12% +/- 2).

Applications:

BRAZARGENT 5038 can be used for brazing any Steels, Copper and copper based alloys, stainless steels, as well for Nickel and Nickel based alloys. Can be used for brazing with flame or induction brazing procedures (except coated forms).

Typical applications are found e.g. in HVAC, automotive, food and sanitary, electric industry, household and healthcare sectors. Operating temperature of brazed joint approx. -200°C to +200°C (without loss in strength).

Typical Chemical Compositions (%):

Ag	Cu	Zn	Sn	Al	Bi	Cd	Si*	P	Pb	Max impurities
38.00	32.00	27.80	2.10	<0.001	<0.03	<0.01	0.10	<0.008	<0.025	<0.15

Typical Physical Properties:

Colour	Solidus (˚C)	Liquidus (˚C)	Density g/cm³	Elongation %	Tensile strength (MPa)	Electrical Conductivity (%IACS)	Electrical Resistivity (Micro-ohm-cm)
Silver - Yellow	650	720	8.80	18 %	520	17.97	9.46

Ag 138Si *: A small amount of Silicon (~0.1%) is added to the melting in order to improve stability of the alloy and brazability (no sparkling effect).

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 x 500 (mm)	Type						OXY/ACETYLÈNE	INDUCTION	AÉRO-PROPANE	FOUR/OVEN
	Bare	Coated	TBW	Coil/Spool	Preforms					
Ø 1.5 to 3.0	√	√	√	√	√	Bare	√	√	√	√
						Coated	√	X	√	X
Ø 0.7 to 3.0						TBW	√	√	√	√

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