PHOSBRAZ AG150

CuPAg 15% Manual brazing

TECHNICAL DATA SHEET 140

Specifications:

Alloy	Working Temperature (˚C)	NF EN ISO 17672	AWS A-5.8	DIN 8153	EN ISO 3677	AMS
Cu-P-Ag	700	CuP 284	BCuP-5	L-Ag 15P	B Cu80 Ag P 645-800	-

Characteristics:

PHOSBRAZ AG150 is CuP alloy with Silver, which lowers the liquidus point, refines the alloy, improving electrical conductivity and increasing ductility due to high % of Ag. Also increase its resistance to vibration and cyclic pressure Polyvalent alloy suitable for copper brazing, without need of using a flux, Good fluidity when brazing sleeves/tubes and copper connections, machine junctions, and so forth, which produce strong leak proof joints. This alloy has good gap filling properties and is well suited to bridge wide gaps. Its low melting temperature gives very good resistance.

This brazing alloy is not recommended to be used for the media having sulphur. Also it is not allowed to use for joining steels (Fe) or materials containing Iron (Fe), Nickel (Ni), Cobalt (Co) as it will form brittle phase in the joint. The corrosion resistance of this alloy is comparable to that of copper excepts, when the joint is exposed to sulphur containing gas or at elevated temperatures.. Under these conditions, it is expected that, this alloy will undergo progressive deterioration as other copper phosphorus alloy with Silver or without Silver.

Applications:

PHOSBRAZ AG 150 is mainly used in Plumbing, Electrical components, Refrigeration and Heating/Ventilation. An economical alloy used in joining copper to copper. It can also use to join coper to low zinc brasses with Phosbraz flux.In the electric and electromechanic Industry In Air conditioning and refrigeration application, **PHOSBRAZ AG 150** can be used for the service temperature between +150˚C (without loss in strength) to -70˚C. This alloy can be used with flame.

Typical Chemical Compositions (%):

Cu	P	Ag	Al	Bi	Cd	Pb	Zn	Zn + Cd	Max. impurities
Balance	5.00	15.00	<0.01	<0.030	<0.01	<0.020	<0.050	<0.05	<0.25

Typical Physical Properties:

Colour	Solidus (˚C)	Liquidus (˚C)	Density g/cm³	Elongation %	Tensile strength (MPa)	Electrical Conductivity (%IACS)	Electrical Resistivity (Micro-ohm-cm)
Copper	645	800	8.4	10%	530	9.90	17.40

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

Preform sizes and other type other than above standard dimensions are solicited case to case basis

Liability: This document is intended to assist the user in choosing the product. It is up to the user to verify that the chosen product is suitable for applications for which it is intended. The company FSH Welding Group reserves the right to alter specifications without prior notice of its products. The descriptions, illustrations and specifications are for reference only and cannot be held liable for FSH Welding Group. **Fumes:** Consult information on MSDS, available upon request.