PHOSBRAZ 675Sn

Copper Phosphorous Brazing Alloy

TECHNICAL DATA SHEET 95

Specifications:

Alloy	Working Temperature (˚C)	NF EN ISO 17672	AWS A-5.8	DIN 8513
Cu-P-Sn	675	CuP 385	B CuP-9	-

Characteristics:

PHOSBRAZ 675Sn Alloy with high Phosphorus and Tin content which is recommended for copper brazing. Tin (Sn) lower the melting point, increase fluidity and enhance good wetting properties. Also offers good corrosion resistance and is non-toxic. Due to its low melting alloy requires a rapid heating cycle to ensure that the elements do not separate through liquation.
Excellent fluidity and low melting arrange. Manuel alloy, but it can also be used on work shop for automatic, Oven, flame and Induction brazing. Alloy is also recommended for narrow gap due to its good capillary action.

Applications:

PHOSBRAZ 675Sn joining copper to copper it is act as self-fluxing alloy and does not required additional flux. It can be used on cuprous alloys (bronze, brass) with Phosbraz flux, electrical industry, Plumbing trade. This alloy with flux coating it is recommend for brazing Copper with brass. 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. In Air conditioning and refrigeration application, **PHOSBRAZ 675Sn** can be used for the service temperature between +150˚C (without loss in strength) upto -20˚C. This alloy can be used for flame…Maximum short service joint operating temperature 200˚C.

Typical Chemical Compositions (%):

Cu	P	Sn	Al	Bi	Cd	Pb	Zn	Zn + Cd	Max. impurities
Reminder	6.8	6.6	<0.01	<0.030	<0.01	<0.025	<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)
Metallic	635	675	8.0	2%	350	-	-

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 and Types & Heating Source Recommendation:

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

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