Selectarc BRAZING

PHOSBRAZ V6

Copper Phosphorous Brazing Alloy

TECHNICAL DATA SHEET 50

Specifications:

Alloy	Working Temperature (˚C)	NF EN ISO 17672	AWS A-5.8	DIN 8513
Cu-P	760	CuP 179		L-Cu P6

Characteristics:

PHOSBRAZ V6 is alloy with controlled fluidity brazing alloy. P act as de-oxidation, hence do not required additional flux for brazing Copper to Copper.This alloy with a great flow has been specially created with a perfect metal degassing, which gives a maximum comfort in use.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 as in a cooking range. 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 V6 is recommended for capillary brazing of tubes and connections, water heaters, refrigeration systems. Mainly used by plumbers and heating engineers. It can also be used on cuprous alloys (bronze, brass) with Phosbraz flux. Brazing application with Electrical industry, Refrigeration & Air-condition industry, Plumbing trade. 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 V6** can be used for the service temperature between +150˚C (without loss in strength) to -20˚C. This alloy can be used for flame. Maximum short service joint operating temperature 200˚C.

Typical Chemical Compositions (%):

Cu	P	Al	Bi	Cd	Pb	Zn	Zn + Cd	Max. impurities
Reminder	6.30	<0.01	<0.030	<0.01	<0.025	<0.050	<0.05	<0.25

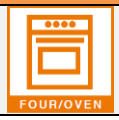
Typical Physical Properties:

Colour	Solidus (˚C)	Liquidus (˚C)	Density g/cm³	Elongation %	Tensile strength (MPa)	Electrical Conductivity (%IACS)	Electrical Resistivity (Micro-ohm-cm)
Copper	710	845	8.10	5%	550	7.20	23.95

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							
	Bare	Coated	Coil	Preforms				
1.50, 2.00, 2.50, 3.00	√	–	–	–	√	√	X	X

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

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Rev 09/2016