

# ZINAL 4 TBW

Seamless Flux Cored Soldering Wire  
(Joining Cu-Al)

## TECHNICAL DATA SHEET 411

### Specifications:

Alloy	Working Temperature (°C)	NF EN ISO 17672	AWS A-5.8	DIN 8513	EN ISO 3677	AMS
Zn-Al	420					-

### Characteristics:

**ZINAL 4 TBW** Seamless tubular soldering wire of alloy of Zn-Al (98:2) with non-corrosive flux at the core of the wire. No External flux required. This wire is adaptable for joining of grades of Aluminium without magnesium Alloy. Being low melting alloy it reduce the possibility of overheating of the parts. Flux being non-corrosive nature, no need of post brazing cleaning. Give very strong joints. No separate flux to apply. No need flux handling systems or corrosive flux to apply. Product does not fume.

### Applications:

**ZINAL 4 TBW** is used for joining aluminium alloys of 1000, 3000 and 6000 series. It can also be used for joining Aluminium to Copper, Aluminium to brass, and Aluminium to stainless steel joints. For dissimilar metal application the long term galvanic corrosion potential should be considered. Also its main usages are in the field of heat-exchangers, air-conditioners and condensers and automotive refrigeration systems.

### Typical Chemical Compositions (%):

Zn	Al	Si	Fe	Mn	Mg	Cd	Pb	Max. impurities
Rem.	2.00	0.010	<0.010	<0.010	<0.01	<0.010	<0.010	<0.15





### Typical Physical Properties:

Colour	Solidus (°C)	Liquidus (°C)	Density g/cm <sup>3</sup>	Elongation %	Tensile strength (MPa)	Electrical Conductivity (%IACS)	Electrical Resistivity (Micro-ohm-cm)
Silver Grey	385	420	6.90	-	104	-	-

### 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			 OXYACETYLENE	 INDUCTION	 AÉRO-PROPANE	 FOUR/OVEN
	Cut Length	Coil/ Spool	Preforms				
1.20 - 3.00	√	√	-	√	√	√	√

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

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