

# AIBz8 (ERCuAl-A1)

## Material Designation \*

AWS	ERCuAl-A1
EN	CuAl7 (Cu 6100)
JIS	/
GB	SCu6100A

## Chemical Composition

Cu	Balance	%
Al	6.0-8.5	%



## Characteristics

AIBz8 is a welding material which is aluminum bronze alloy without iron. The fluidity of molten metal is good, and the shape of welding seam is beautiful.

## Typical Applications

It is applied in shipbuilding and machinery manufacturing and is suitable for welding of carbon steel and stainless steel. It is also suitable for butt welding of steel and copper and surfacing welding of hydraulic ball bowl and bearing surface.

## Physical Properties

Density <sup>①</sup>	7.78	g/cm <sup>3</sup>
Melting point	1040	°C
Thermal conductivity <sup>①</sup>	69.2	W/m·K
Coefficient of thermal expansion <sup>②</sup>	17.1	10 <sup>-6</sup> /K
Electrical conductivity <sup>①</sup>	15	%IACS

Note①: Temperature for testing is 20°C.

Note②: Temperature range for testing is 20-300°C.

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## Delivery Form

	Packing	Size(ODxDxHeight)	Weight/Length	Diameter
			kg/mm	mm
Spool	D200 (Plastic spool)	$\Phi 200 \times \Phi 52 \times 55$	5.0	$0.8 \leq \Phi \leq 1.6$
	D300 (Plastic spool)	$\Phi 300 \times \Phi 52 \times 100$	12.5	$0.8 \leq \Phi \leq 1.6$
	BS300 (Galvanized steel spool)	$\Phi 300 \times \Phi 52 \times 100$	12.5	$0.8 \leq \Phi \leq 1.6$
Barrel	100kg (Barrel carton)	$\Phi 500 \times \Phi 305 \times 500$	100	$0.8 \leq \Phi \leq 1.2$
	200kg (Barrel carton)	$\Phi 500 \times \Phi 300 \times 750$	200	$0.8 \leq \Phi \leq 1.2$
	200kg (Barrel carton)	$\Phi 660 \times \Phi 440 \times 700$	200	$\Phi = 1.6$
Straight bar	Crate	--	250-3000mm	$1.6 \leq \Phi \leq 7.0$
Coil wire	Kraft/crate	--	10-200	$0.8 \leq \Phi \leq 7.0$

\*Composition           AWS  
Other Physical Properties   AWS

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