

TECHNICAL SHEET

Ag55Sn

Product name

Ag55Sn

Class of product

Silver based brazing alloy, cadmium-free

Corresponding standards

ISO 17672	Ag 155
EN 1044	AG 103
AWS A5.8-04	----
DIN8513	L-Ag55Sn

Nominal composition (weight %)

Ag:	55
Cu:	21
Zn:	22
Sn:	2

Physical and technical properties

Melting range (Solidus – Liquidus):	630 - 660 °C
Brazing temperature:	~ 670 °C
Density:	9,4 g/cm ³
Tensile strength (filler metal):	44 kg/mm ²
Electrical conductivity:	~ 7,0 m/Ω·mm ²
Recommended joint gap:	0,05 – 0,15 mm
Continuous service joint operating temp.:	-200 / +200 °C

Range of application

Ag55Sn is a low melting, cadmium-free, silver brazing alloy with excellent flow properties.

It can be used to join ferrous, non ferrous and dissimilar metals and alloys with close joint clearances, such as steel, stainless steel, copper, copper alloys, nickel, nickel alloys.

When brazing in an oxidizing environment a proper flux should be used.

Due to its low melting point it is particularly suited to braze stainless steel; however if the stainless steel joint will be exposed to water and/or moisture, it is advised to use zinc-free or nickel-bearing alloys, in order to avoid possible problems of interfacial corrosion.

Brazing procedures range from flame to induction.

Tensile strength of joints brazed with Ag55Sn will generally exceed base metals strength. Joint strength is however a function of various factors, such as: type of base metals to be joined, type of joint, joint clearance, brazing procedure, etc.

Typical applications are in the automotive, electric, air conditioning and refrigeration industries.

Characteristics Make-up

Rods:	Ø 0,5 ⇨ 4,0 mm	Length: 500 / 1.000 mm
Flux Coated Rods:	Ø 1,5 ⇨ 3,0 mm	
Wires:	Ø 0,25 ⇨ 3,0 mm	Spooled and coiled
Strips:	Thickness: 0,1 ⇨ 1 mm	Width: 1,3 ⇨ 80 mm
Rings		
Preforms from Wire and from Strip		
Pastes & Powders		

Other dimensions are available upon request.

NOTE:

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