

TECHNICAL SHEET

Ag40Ni/1

Product name

Ag40Ni/1

Class of product

Silver based brazing alloy, cadmium-free and zinc-free

Corresponding standards

ISO 17672 -----
EN 1044 -----
AWS A5.8-04 -----
DIN8513 -----

Nominal composition (weight %)

Ag: 40
Cu: 58
Ni: 2

Physical and technical properties

Melting range (Solidus – Liquidus): 780 - 900 °C
Brazing temperature: ~ 900 °C
Density: 9,6 g/cm³
Tensile Strength (filler metal): 35 kg/mm²
Recommended joint gap: 0,075 – 0,2 mm
Continuous service joint operating temp.: -200 / +200 °C

Range of application

Ag40Ni/1 is a cadmium-free and zinc-free silver brazing alloy with good 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.

The alloy is particularly suited for the brazing of stainless steel elements when the joint is expected to be exposed to humid conditions and/or wet environments, and when there is the need to avoid joint failure by the mechanism of interfacial corrosion (stainless steel joints).

Brazing procedures range from flame to induction, and also to furnace brazing under protective atmosphere, thanks to the absence of highly volatile elements such as zinc and cadmium.

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

Tensile strength of joints brazed with Ag40Ni/1 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.

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	Spoiled 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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