

TECHNICAL SHEET

Ag56InNi

Product name

Ag56InNi

Class of product

Silver based brazing alloy, cadmium-free and zinc free

Corresponding standards

ISO 17672	-----
EN 1044	AG 403
AWS A5.8-04	-----
DIN 8513	-----

Nominal composition (weight %)

Ag:	56
Cu:	27
Ni:	2,5
In:	14,5

Physical and technical properties

Melting range (Solidus – Liquidus):	600 - 710 °C
Brazing temperature:	~ 720°C
Density:	~ 9,6 g/cm ³
Recommended joint gap:	0,1 – 0,2 mm
Continuous service joint operating temp.:	-200 / +200 °C

Range of application

Ag56InNi is a cadmium-free and zinc-free silver brazing alloy for special purposes applications.

It can be used to braze a wide variety of different metals and alloys, and is particularly suited to join stainless steels and difficult to braze materials such as cemented carbides, hard-metal, tungsten carbides, etc.

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).

Being zinc-free Ag56InNi is also well suited to join tools and elements which will be subject to a TiN coating process.

Brazing procedures range from flame, to induction, to oven and to vacuum techniques.

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

Tensile strength of joints brazed with Ag56InNi 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 carbide and diamond tipped tools industry and in the joining of stainless steel elements.

Characteristics Make-up

Rods

Flux Coated Rods

Wires

Strips/Rings

Preforms from Wire and from Strip

Pastes & Powders

NOTE:

Information contained in this data sheet are based on the knowledge available to us at the date of last document revision and are believed to be accurate. Anyway, no data contained in this data sheet may be regarded as an assurance of any property of the product. We do not assume any responsibility for results obtained or damages occurred from the use of the information contained in this data sheet. We do not assume any responsibility for any un-proper use of the product. Users should verify the suitability and completeness of information with regard to specific use of the product. As end use of product is not under our direct control, it is the user's responsibility to fully comply with applicable laws and regulations in safety and hygiene.

STELLA s.r.l.

Via Marconi 26 – 21041 ALBIZZATE (VA) – ITALY

Tel. +39-0331-985787 – Fax +39-0331-985803

info@stella-welding.com - www.stella-welding.com