

# TECHNICAL SHEET

## Ag49MnNi/1 TR 161

### Product name

Ag49MnNi/1 TR 161

### Class of product

Three-layered strip of silver brazing alloy, cadmium free

### Corresponding standards (external brazing layers)

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

### Nominal composition of external brazing layers (weight %)

Ag: 49  
Cu: 27,5  
Zn: 20,5  
Ni: 0,5  
Mn: 2,5

### Physical and technical properties

Melting range (Solidus – Liquidus): 670 – 690 °C  
Brazing temperature: ~ 700 °C  
Density: 9,0 g/cm<sup>3</sup>  
Ratio: 1:6:1

### Range of application

Ag49MnNi/1 TR 161 is a special purpose variant of the popular Ag49MnNi/1 TR copper sandwiched trifoil for the brazing of carbides and of hard-metal.

Its special 1:6:1 ratio between the external silver alloy layers and the central copper layer, make it suitable for brazing in extremely difficult conditions, such as: very large carbides, or very big pieces, or extremely hard carbide types, or very long heating cycles, etc., ensuring maximum prevention of cracking phenomena due to differences in thermal expansions.

Brazing procedures range from manual to induction, and to resistance techniques.

When brazing in an oxidizing environment a proper flux should be used (AG8 is recommended).

The main applications of this alloy are found in the tool industry for the brazing of big carbide tipped tools, such as, but not limited to, knives and tools for paper cutting.

### Characteristics Make-up

Strips: Thickness: 0,1 ⇒ 1 mm Width: 1,3 ⇒ 80 mm  
Preforms from Strip

Other dimensions are available upon request.

### NOTE:

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