### Product name

Ag10CuP

### Class of product

Silver-Copper-Phosphorous brazing alloy

### Corresponding standards

- ISO 17672
- EN1044
- AWS A5.8-04
- DIN 8513

### Nominal composition (weight %)

- Ag: 10
- Cu: 84
- P: 6

### Physical and technical properties

- **Melting range (Solidus - Liquidus):** 650 - 750 °C
- **Minimum brazing temperature (flow point):** 720 °C
- **Density:** 8.3 g/cm³
- **Tensile Strength (filler metal):** 65 kg/mm²
- **Recommended joint gap:** 0.05 – 0.2 mm
- **Continuous service joint operating temp.:** -55 / + 150 °C
- **Max. short service joint operating temp.:** 200 °C

### Range of application

Ag10CuP is a silver-copper-phosphorous brazing alloy, with good flow characteristics. It can be used to join copper to copper or copper based base materials (e.g. bronzes / brasses).

The phosphorus contained in the alloy acts as a fluxing agent, so that it is not necessary to use an additional flux when brazing copper to copper; however when joining copper based materials (e.g. bronzes / brasses) a proper flux should be used.

Ag10CuP should not be used on ferrous or nickel alloys, or alloys containing more than 10% of nickel, due to the formation of brittle intermetallic compounds which will cause failure of the joint.

Corrosion resistance of Ag10CuP is generally satisfactory, except when the joint is contact with sulphurous atmospheres (especially at high temperatures); the alloy should therefore not be used to join parts that could come into contact with sulphur containing medias.

Typical brazing processes include flame and induction brazing.

Typical applications are in plumbing, in the electric industry and in the refrigeration and air conditioning industry.

### Characteristic Make-up

- **Rods:** Ø 1.5 ⇒ 4.0 mm  □ 1.5 ⇒ 4.0 mm  □ Length: 500 / 1.000 mm
- **Wires:** Ø 1.0 ⇒ 3.0 mm  □ Spooled and coiled
- **Rings**
- **Preforms from Wire**
- **Pastes & Powders**

Other dimensions are available upon request.
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 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.