TECHNICAL SHEET Ag5CuP

Product name

Aq5CuP

Class of product

Silver-Copper-Phosphorous brazing alloy

Corresponding standards

DIN8513 L-Ag5P EN1044 CP 104 AWS A5.8-04 BCuP-3

Nominal composition (weight %)

Ag: 5 Cu: 89 P: 6

Physical characteristics

Melting range (Solidus – Liquidus): 650 - 810 °C
Brazing temperature: 740 °C
Density: 8,2 g/cm³
Tensile Strength: 55 kg / mm²

Range of application:

Ag5CuP is a silver-copper-phosphorous brazing alloy, with very good flow characteristics.

Ag5CuP 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.

Ag5CuP should not be used when joining parts that could come into contact in operation with sulphur containing medias, and should not be used on ferrous or nickel alloys, due to the formation of brittle intermetallic compounds which will cause failure of the joint.

The alloy is capable of filling large gaps, being very effective also on loose-fitting joints.

Very good service performance are obtained on joints subject to vibrations.

Typical brazing processes include flame, induction and furnace brazing.

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

Characteristics Make-up:

Rods: \emptyset 1,5 \bullet 4,0 mm; \Box 1,5 \bullet 4,0 mm Length: 500 / 1.000 mm Wires: \emptyset 0,5 \bullet 3,0 mm (spooled and coiled)

Rings

Pastes & Powders

Other dimensions are available upon request