

TECHNICAL SHEET

CuP6

STELLA
WELDING ALLOYS

Product name

CuP6

Class of product

Copper-Phosphorous brazing alloy

Corresponding standards

DIN8513 L-CuP6
EN1044 CP 203
AWS A5.8-04

Nominal composition (weight %)

Cu: 94
P: 6

Physical characteristics

Melting range (Solidus – Liquidus): 710 - 880 °C
Brazing temperature: 760 °C
Density: 8,1 g/cm³
Tensile Strength: 56 kg / mm²

Range of application:

CuP6 is a copper-phosphorous brazing alloy, with good flow characteristics.

CuP6 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.

CuP6 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.

Typical brazing processes include flame, induction and furnace brazing.

Typical applications are in the refrigeration and air conditioning industries, for joining copper to copper on vibration-free joints; it is quite effective when joining copper pipes and fittings, in all positions.

Characteristics Make-up:

Rods: Ø 1,5 ⇒ 4,0 mm; □ 1,5 ⇒ 4,0 mm Length: 500 / 1.000 mm

Wires: Ø 0,5 ⇒ 3,0 mm (spooled and coiled)

Rings

Pastes & Powders

Other dimensions are available upon request

The above data are subject to change without notice by Stella.

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