



## Technical Data Sheet BrazeTec S 2



TD TM-BT 0604 E.05

### Inhalt

#### Standard

DIN EN ISO 17672  
(DIN EN 1044 )

CuP 279  
(CP 105)

#### Nominal composition [wt.-%]

Permitted impurities max. [wt.-%]      Cu remainder; Ag 2; P 6.3  
Max. impurities [wt.-%]                      Al 0.01; Bi 0.030; Cd 0.01; Pb 0.025; Zn 0.05; Zn + Cd 0.05  
0.25

#### Technical data

Melting range                                      approx. 645 - 825 °C  
Working temperature                              approx. 740 °C  
Density    approx. 8.1 g/cm<sup>3</sup>  
Tensile strength acc. DIN EN 12797            approx. 250 MPa with Cu  
Elongation    approx. 5 %  
Electrical Conductivity                            approx. 5.0 m/ Ωmm<sup>2</sup>  
Operating temp. of brazed joint                max. 150 °C (without loss in strength)

#### Standard delivery forms\*

Wire:    1.0 - 1.5 - 2.0 mm Ø  
Rods:    1.0 - 1.5 - 2.0 mm Ø, 500 mm length  
Ribbon:    0.1/ 0.2/ 0.3/ 0.4 mm thickness and 70 mm width  
Preforms:    rings, shaped parts, sections, stamped and shaped parts,  
lamina, discs, perforated plates

\*Other delivery forms upon request

#### Applications

BrazeTec S 2 is a phosphorous-containing brazing alloy with excellent flow characteristics. The brazing alloy is suitable for joining copper to copper or copper-based materials. Due to its phosphorous content, you have not to use an additional flux for brazing only copper to copper. This brazing alloy is not allowed to be used if sulfur containing medias may have contact with the joint during operating. Further it is not allowed to use this alloy for joining steels (Fe) or materials containing iron, nickel cobalt as it will be formed brittle phases in the joint. In refrigeration and air conditioning industries BrazeTec S 2 can be used for service temperatures down to -50°C. It can be used for brazing with flame, with induction heating and in a furnace under protective atmospheres. Typical applications are found e.g. in the plumbing trade, in the electric industry and for the refrigeration and air conditioning industry. BrazeTec S 2 meets the requirements of the working sheet "GW2" and "GW 7" of DVGW (German association of Gas and Water). It is approved and registered by DVGW (DW-0105CL0475) and has been awarded by the Gütegemeinschaft Kupferrohr e.V. (The copper tube Manufacturers Quality Association).

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