

Technical Data Sheet BrazeTec CB4

Standard

BrazeTec Standard
(ISO 3677)

(B-Ag70.5CuTi 780/805)

Nominal composition [wt.-%]

Permitted impurities max. [wt.-%]

Max. impurities [wt.-%]

Ag 70.5; Cu 26.5; Ti 3

Al 0.001; Bi 0.030; Cd 0.010; P 0.008; Pb 0.025; Si 0.05

0.15

Technical data

Melting range

approx. 780 - 805 °C

Working temperature

approx. 850 - 950 °C

Density

approx. 9.9 g/cm³

The strength values of joints brazed with active brazing alloy BrazeTec CB4 depend on the base materials and the brazing process parameters. In general it can be said that the joints fail in the ceramic if optimized process parameters have been used.

Standard delivery forms*

Wire:

1.0 - 1.5 - 2.0 mm Ø

Ribbon:

0.1/ 0.2 mm thickness and 50 mm width

Preforms:

rings, shaped parts, sections, stamped and shaped parts, shims, discs, perforated plates

*Other delivery forms upon request

Applications

Active brazing alloy BrazeTec CB4 can be used for high temperature brazing of ceramics, ceramic-metal-joints, graphite and diamonds. A minimum brazing temperature of 850 °C is recommended to get a joint to the ceramic. Higher brazing temperatures improve the wetting behavior. The brazing processes have to be carried out in vacuum or with argon (4.8 or purity 99,998%) as protective atmosphere. If the brazing process is carried out in vacuum the brazing temperature should not be higher than 900 °C to avoid the evaporation of silver. Active brazing alloys do not flow on ceramics. That's why the active brazing alloys always have to be applied between the surfaces to be brazed.

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