

## Technical Data Sheet BrazeTec CB 12

### Standard

BrazeTec Standard

### Nominal composition [wt.-%]

Permitted impurities max. [wt.-%]

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Cu 55.1; Ag 39.9; Ti 5.0

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

0.15

### Technical data

Melting range of brazing alloy

approx. 780 - 850 °C

Brazing temperature

min. 900°C

Density of brazing paste

approx. 3.9 g/cm<sup>3</sup> (20°C)

Metal content

approx. 85 wt.-%

Viscosity

25 - 30 Pa s (Cone-Plate; 150 µm; D= 50/s; 20°C)

Flash point of solvent

approx. 105°C

Evaporation temperature of binder

approx. 360 - 400°C at 1 bar

Cleaning agent

BrazeTec Cleaning Agent P

Shelf life

6 months in the original closed container storage temperature +5 to +30°C.

Avoid rapid changes in temperature. Stir well before use

### Packaging

Standard

0.10; 0.25 kg

### Applications

BrazeTec CB 12 Paste is suitable for high temperature brazing of ceramics, ceramic-metal joints, graphite and diamonds. To get a joint to the ceramic a minimum brazing temperature of 1000°C must be chosen for active brazing paste BrazeTec CB 12. Higher brazing temperatures improve the wetting behavior.

As brazing atmospheres pure argon (4.8 or purity 99.998%) or vacuum (app.  $5 \times 10^{-4}$  mbar) must be used. In case of brazing in vacuum the brazing temperature should not be much higher than 1000°C to avoid evaporation of silver.

Active brazing alloys do not flow on ceramics. Therefore, the active brazing alloy must be applied on the surfaces to be brazed.

BrazeTec CB 12 paste is suitable for screen printing. The mesh opening of screen printing fabrics should be between 150 and 220 mesh.

The strength values of joints brazed with BrazeTec CB 12 paste depend on the used base materials and brazing parameters. In general, it can be said that joints brazed with optimized brazing parameters fail in the ceramic.

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