

## Technical Data Sheet BrazeTec CB 10

### Standard

BrazeTec Standard  
(ISO 3677) (B-Ag64.8CuTi 780/805)

**Nominal composition [wt.-%]** Ag 64.8; Cu 25.2; Ti 10  
Additional elements max. [wt.-%] Al 0.001; Bi 0.030; Cd <0.010; P 0.008; Pb 0.025; Si 0.05.  
Max. impurities [wt.-%] 0.15

### Technical data

Melting range of brazing alloy approx. 780 - 805°C  
Brazing temperature min. 850°C  
Density of brazing paste approx. 3.9 g/cm<sup>3</sup> (20°C)  
Metal content approx. 85 wt.-%  
Viscosity 14 - 20 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 10 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 850°C has to be chosen for active brazing paste BrazeTec CB10. 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) have to be used. In case of brazing in vacuum the brazing temperature should not be much higher than 900°C to avoid evaporation of silver.

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

BrazeTec CB 10 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 10 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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