

## Technical Data Sheet BrazeTec CB 12

### Standard

BrazeTec Standard

<b>Nominal composition [wt.-%]</b>	Cu 55.1; Ag 39.9; Ti 5.0
Permitted impurities 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 - 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.

Details in product brochures or other advertisements about our products, equipment, plant and processes are based on our research and our experience in the field of applied engineering and are merely recommendations. It is not possible to infer any warranted qualities or warranted use from these details, unless they were expressly agreed as a warranted quality. We reserve the right to make technical modifications in the course of our product development.

The user must verify the suitability of our products and processes for the use or application intended by him on his own responsibility. This shall also apply to the protection of third party property rights as well as to applications and processes. The properties of samples and specimens are binding only if these have been expressly agreed to define the quality of the goods. Information on the quality and durability and other particulars are warranted only if these are agreed and designated as such. The specifications agreed with the user/purchaser in writing are relevant for the quality of the goods and if specifications have not been agreed in writing, the information contained in our technical data sheets, specifications or drawings.

Any additional or diverging agreements on the quality must be in writing. Any suitability of the product for the presupposed or customary use which supplements or diverges from the agreed quality is out of the question. Our General Conditions of Sale and Delivery shall apply; the current version is available at <http://www.saxonia-tm.de/en/TechnicalMaterials/agbs/>.