

Technical Data Sheet BrazeTec CB11 Paste

Standard

BrazeTec Standard
(ISO 3677)

(B-Ag90Ti 970)

Nominal composition [wt.-%]

Permitted impurities max. [wt.-%]
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Ag 90.0; Ti 10
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. 970 °C
Optimum brazing temperature	approx. 1000 - 1050 °C
Density of brazing paste	approx. 3.3 g/cm ³ (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	min. 6 months, but only in the original sealed container at storage temperatures between +5 to +30°C. stir well before use

Packaging

Standard 0.10; 0.25 kg

Applications

BrazeTec CB11 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 has to be chosen for active brazing paste BrazeTec CB11. Higher brazing temperatures improve the wetting behavior.

As brazing atmospheres pure argon (4.8 or purity 99.998%) or vacuum (app. 5×10^{-4} mbar) have to 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 has to be applied on the surfaces to be brazed.

BrazeTec CB11 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 CB11 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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