TD-STM-BT-E-0707-01

# Technical Data Sheet BrazeTec CB 11

## Standard

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| BrazeTec Standard | |
| *(ISO 3677)* | *(B-Ag90Ti 970)* |
| **Nominal composition [wt.-%]** | (B-Ag90Ti 970) |
| 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

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| Melting range of brazing alloy | approx. 970°C |
| Brazing temperature | min. 1000°C |
| Density of brazing paste | approx. 3.3 g/cm³ (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.<br>Avoid rapid changes in temperature.<br>Stir well before use |

## Packaging

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| Standard | 0.10; 0.25 kg |

## Applications

BrazeTec CB 11 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 CB 11. Higher brazing temperatures improve the wetting behavior.

As brazing atmospheres pure argon (4.8 or purity 99.998%) or vacuum (app. 5 x 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 CB 11 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 11 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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