# Technical Data Sheet BrazeTec CB6

**Standard**
BrazeTec Standard
*(ISO 3677)* *(B-Ag98.4InTi 948/959)*

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|---|---|
| **Nominal composition [wt.-%]** | Ag 98.4; In 1; Ti 0.6 |
| 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 | approx. 948 - 959 °C |
| Working temperature | approx. 1000 - 1050 °C |
| Density | approx. 10.3 g/cm³ |

The strength values of joints brazed with active brazing alloy BrazeTec CB6 depend on the base materials and the brazing process parameters. In general it can be said that the joints fail in the ceramic if optimized process parameters have been used.

**Standard delivery forms***

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|---|---|
| Wire: | 1.0 - 1.5 - 2.0 mm Ø |
| Ribbon: | 0.1/ 0.2 mm thickness and 50 mm width |
| Preforms: | rings, shaped parts, sections, stamped and shaped parts, shims, discs, perforated plates |

*Other delivery forms upon request

**Applications**
Active brazing alloy BrazeTec CB6 can be used for high temperature brazing of ceramics, ceramic-metal-joints, graphite and diamonds. A minimum brazing temperature of 1000 °C is recommended to get a joint to the ceramic. Higher brazing temperatures improve the wetting behavior. The brazing processes have to be carried out in vacuum or with argon (4.8 or purity 99,998%) as protective atmosphere. If the brazing process is carried out in vacuum the brazing temperature should not be higher than 1000 °C to avoid the evaporation of silver. If argon is used a brazing temperature of 1050 °C is possible. Active brazing alloys do not flow on ceramics. That's why the active brazing alloys always have to be applied between the surfaces to be brazed.
Because of the low titanium-content active brazing alloy BrazeTec CB6 is regarded as special alloy for brazing silicon nitride.