

Technical Data Sheet BrazeTec P 1002.1

Standard

ISO 17672	Ni 620
(US-Standard ANSI/AWS A5.8)	(BNi-2)
(DIN EN 1044)	(NI 102)

Nominal composition [wt.-%]

Permitted impurities max. [wt.-%]	Ni Rem.; Cr 7.0; Si 4.5; B 3.1; Fe 3.0 Al 0.05; Co 0.10; S 0.02; Se 0.005; Ti 0.05; Zr 0.05 C 0.06; P 0.02
Max. impurities [wt.-%]	0.50

Technical data

Melting range of brazing alloy	approx. 970 - 1000 °C
Optimum brazing temperature	approx. 1050 °C
Density of brazing alloy	approx. 8,0 g/cm ³
Density of brazing paste	approx. 3,4 g/cm ³ (20 °C)
Metal content	approx. 85 wt.-%
Grain size of brazing alloy powder	< 63 µm
Viscosity	20 - 25 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 stir well before use

Packaging

Standard	1; 3; 5; 10; 25 kg
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Applications

BrazeTec P 1002.1 is a suspension consisting of a brazing alloy powder and a solvent based binder system which is used to apply thin brazing alloy layers on work piece surfaces. The suspension can be applied by conventional screen printing techniques.

The nickel based brazing alloy can be used for brazing nickel and nickel alloys, cobalt and cobalt alloys, any steels and stainless steel, and in some cases for special metals and their alloys.

The brazing process has to be carried out in vacuum or protective atmosphere. Nitrogen containing atmospheres are not suitable for this brazing alloy.

To evaporate the solvent a drying process at temperatures between 70 °C and 120 °C has to be carried out. A drying chamber/furnace with an exhaust system should be used to avoid explosive vapor-air-mixtures. The brazing process should include a holding time at 400 °C to ensure a residue free burn-out of the binder.

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