



## Brazing alloy BrazeTec S2

### Composition (% in weight)

Ag	Cu	Zn	Sn	Si	P	Mn	Ni	Other	ISO 17672	EN 1044:1999	ISO 3677
2	91,7	-	-	-	6,3	-	-	-	CuP 279	CP 105	B-Cu92PAg 645/825

### Technical data:

Melting range (°C)	645 - 825
Working temperature (°C)	740
Melting range according to DSC measurement (°C)	-
Min. brazing temperature (°C)	-
Electrical conductivity (m/Ω mm <sup>2</sup> )	4
Elongation %	5
Density (g/cm <sup>3</sup> )	8,1
Shear strength (MPa)	-
Tensile strength DIN EN 12797 (MPa)	with Cu:250
Operating temperature of brazed joint (min/max) ± (°C)	-55/+150

### Applications

Refrigeration, air conditioning and electrical industry, plumbing technology

### Operating conditions

Silver based brazing alloy, containing phosphorus. Excellent flow, capillarity and mechanical strength characteristics. Used for joining copper and copper alloys. It is not allowed to use this alloy for joining steels, iron, nickel and cobalt as it will be formed brittle phases in the joint. Brazing alloy not allowed to be used while operating in sulphur containing atmosphere, due to the crevice corrosion phenomena.

### Recommended fluxes

Due to its phosphorus content, it is not necessary to use an additional flux for brazing only copper to copper.

### Heat sources

Flame, induction heating, resistance, furnace under protective atmosphere

### Delivery forms

Wire, rods, ribbon, rings, preforms, powder

### Notes

BrazeTec S 2 is approved and registered by DVGW (The copper tube Manufacturers Quality Association), as meets the requirements of the working sheet "GW2" and "GW 7" of DVGW (German Association of Gas and Water). In refrigeration and air conditioning industry can be used for service temperatures down to -50°C.

The information reported in this document about our products and equipment as well as our systems and procedures are based on our research and our experience in the field of applied engineering and are merely recommendations. Italbras S.p.A. cannot foresee all circumstances in which these information and our products will be used, therefore the user must verify the suitability of our products and processes for the use or application intended by him on his own responsibility. Italbras S.p.A. declines any liability for any loss, damage or injury howsoever arising (including any claim brought by third parties) as a result of the use of such information. Each warranty of suitability of our products and their use within the production processes of the user, must be agreed in written form. We reserve the right to make technical modifications to this document in the course of our product development.

### Italbras S.p.A.

Strada del Balsego, 6 – 36100 Vicenza (I)  
[info@italbras.it](mailto:info@italbras.it) - [www.italbras.it](http://www.italbras.it)  
 Tel. +39 0444.3475-00 / Fax +39 0444.3475-01