Brazing alloy BrazeTec S18

Composition (% in weight)

<table>
<thead>
<tr>
<th>Ag</th>
<th>Cu</th>
<th>Zn</th>
<th>Sn</th>
<th>Si</th>
<th>P</th>
<th>Mn</th>
<th>Ni</th>
<th>Other</th>
<th>ISO 17672:2010</th>
<th>EN 1044:1999</th>
<th>ISO 3677</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>75</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>7</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>CuP 286</td>
<td>CP 101</td>
<td>B-Cu75AgP-645</td>
</tr>
</tbody>
</table>

Technical data:

- Melting range (°C): 645
- Working temperature (°C): 650
- Melting range according to DSC measurement (°C): -
- Min. brazing temperature (°C): -
- Electrical conductivity (m/Ω mm²): -
- Elongation %: 10
- Density (g/cm³): 8,4
- 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 credice 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, rings, preforms, powder

Notes
In refrigeration and air conditioning industries it can be used for service temperatures down to -50°C.
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.