TECHNICAL DATASHEET

Brazing alloy BrazeTec S2  
TD EN S2 REV. 3

Composition (% in weight)

<table>
<thead>
<tr>
<th></th>
<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></td>
<td>2</td>
<td>91,7</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6,3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>CuP 279</td>
<td>CP 105</td>
<td>B-Cu92PAg 645/825</td>
</tr>
</tbody>
</table>

Technical data:

- Melting range (°C): 645 - 825
- Working temperature (°C): 740
- Melting range according to DSC measurement (°C): -
- Min. brazing temperature (°C): -
- Electrical conductibility (m/Ω mm²): 4
- Elongation %: 5
- Density (g/cm³): 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 coppertube Manufactures 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.
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