

## TECHNICAL DATA SHEET

### JOINEX688D + Ag05% - 375 ‰

Master alloy for the production of red 375 - 417 - 585 - 750 ‰ gold soldering sheets and wires. The resulting alloy is categorized as a hard soldering and it can be casted in mould or by continuous casting. The use is suggested with the addition of 5 % of pure silver to the master alloy.

TAB.1 - Mechanical data

|                   |      |
|-------------------|------|
| Hardness as cast  | n.d. |
| Hardness hardened | n.d. |
| Tensile strength  | n.d. |
| Yield strength    | n.d. |
| Elongation        | n.d. |

TAB.2 - Physical data

|                    |                                     |
|--------------------|-------------------------------------|
| Color              | red                                 |
| Colour Coordinates |                                     |
| Density            | 12.72 g/cm <sup>3</sup>             |
| Melting Range      | Solidus: 782 °C<br>Liquidus: 932 °C |

TAB.3 - Heat treatments

|                             |                  |
|-----------------------------|------------------|
| Solution annealing          | 525 °C<br>20 min |
| Recrystallization Annealing | 525 °C<br>20 min |
| Hardening                   | n.d.             |

TAB.4 - Mechanical working parameters

|                                |             |      |     |
|--------------------------------|-------------|------|-----|
| Premelting temperature         |             | 1032 | °C  |
| Casting Temperature            | Min:        | 982  | °C  |
|                                | Max:        | 1082 | °C  |
| First thickness reduction      | Lamination: | 20   | %   |
|                                | Drawing:    | 10   | %   |
| Following thickness reductions | Lamination: | 50   | %   |
|                                | Drawing:    | 25   | %   |
| Pickling after annealing       | H2SO4:      | 20   | %   |
|                                | Temp:       | 50   | °C  |
|                                | Time:       | 5    | min |