

TECHNICAL DATA SHEET

SPARK598

Brass for the production of jewels and models obtained by investment casting. The elements contained in this product ensure a high deoxidation after casting and a high surface quality, making it suitable for castings with and without stones in place.

TAB.1 - Mechanical data

| | | |
|-------------------|------|----|
| Hardness as cast | 80 | HV |
| Hardness hardened | n.d. | |
| Tensile strength | n.d. | |
| Yield strength | n.d. | |
| Elongation | n.d. | |

TAB.2 - Physical data

| | | | |
|--------------------|-----------|-------------------|----|
| Color | Deep red | | |
| Colour Coordinates | L*: | 84.52 | |
| | a*: | 12.24 | |
| | b*: | 17.41 | |
| Density | 8.79 | g/cm ³ | |
| Melting Range | Solidus: | 970 | °C |
| | Liquidus: | 1080 | °C |

TAB.3 - Heat treatments

| | | |
|-----------------------------|------|-----|
| Solution annealing | 660 | °C |
| | 30 | min |
| Recrystallization Annealing | 660 | °C |
| | 30 | min |
| Hardening | n.d. | |

TAB.4 - Investment casting parameters

| | | | |
|--|--------------------------|----------------|-------------------------|
| Premelting temperature | | 1180 | °C |
| Casting Temperature | Min: Max: | 1130 1230 | °C °C |
| Water investment powder ratio | | 36-38 | % |
| Flask temperature | Min: Max: | 450 700 | °C °C |
| Quenching time without stones in place | Min: Max: | 5 20 | min min |
| Quenching time with stones in place | | 15 | min in boiling water |
| Pickling | H2SO4: Temp: Time: | 20 50 50 | % °C min |