

## TECHNICAL DATA SHEET

### SPARK591

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	125	HV
Hardness hardened	n.d.	
Tensile strength	n.d.	
Yield strength	n.d.	
Elongation	n.d.	

TAB.2 - Physical data

Color	yellow
Colour Coordinates	L*: 85.51 a*: 3.32 b*: 13.54
Density	8.62 g/cm <sup>3</sup>
Melting Range	Solidus: 890 °C Liquidus: 985 °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		n.d.	
Casting Temperature	Min: Max:	1035 1135	°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:	15 50 50	% °C min