

## TECHNICAL DATA SHEET

### SPARK595HD

Alloy for the production of bronze items, 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	130	HV
Hardness hardened	350	HV
Tensile strength	n.d.	
Yield strength	n.d.	
Elongation	n.d.	

TAB.2 - Physical data

Color	Pale yellow		
Colour Coordinates	n.d.		
Density	8.31	g/cm <sup>3</sup>	
Melting Range	Solidus:	900	°C
	Liquidus:	995	°C

TAB.3 - Heat treatments

Solution annealing	660 30	°C min
Recrystallization Annealing	660 30	°C min
Hardening	350	°C
	180	min

TAB.4 - Investment casting parameters

Premelting temperature		1095	°C
Casting Temperature	Min: Max:	1045 1145	°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