

TECHNICAL DATA SHEET

SPARK498

Master alloy for the production of 930 ‰ sterling silver jewellery obtained by investment casting. The elements contained in this product ensure a high deoxidation in 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*:	83.01	
	a*:	10.39	
	b*:	15.75	
Density	8.79	g/cm ³	
Melting Range	Solidus:	970	°C
	Liquidus:	1080	°C

TAB.3 - Heat treatments

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

TAB.4 - Investment casting parameters

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