

TECHNICAL DATA SHEET

SPARK713A - 750 ‰

Master alloy for the production of white palladium based 585 - 750 ‰ gold 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	165	HV
Hardness hardened	250	HV
Tensile strength	n.d.	
Yield strength	n.d.	
Elongation	n.d.	

TAB.2 - Physical data

Color	Off-white		
Colour Coordinates	L*:	82.59	
	a*:	6.73	
	b*:	15.42	
Density	15.70	g/cm ³	
Melting Range	Solidus:	850	°C
	Liquidus:	900	°C

TAB.3 - Heat treatments

Solution annealing	650 30	°C min
Recrystallization Annealing	700 30	°C min
Hardening	300	°C
	180	min

TAB.4 - Investment casting parameters

Premelting temperature		1000	°C
Casting Temperature	Min: Max:	950 1050	°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