

TECHNICAL DATA SHEET

SPARK725A - 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	156	HV
Hardness hardened	270	HV
Tensile strength	348	MPa
Yield strength	184	MPa
Elongation	39	%

TAB.2 - Physical data

Color	Off-white		
Colour Coordinates	L*:	83.45	
	a*:	2.21	
	b*:	15.21	
Density	17.07	g/cm ³	
Melting Range	Solidus:	954	°C
	Liquidus:	999	°C

TAB.3 - Heat treatments

Solution annealing	800 30	°C min
Recrystallization Annealing	800 30	°C min
Hardening	500	°C
	180	min

TAB.4 - Investment casting parameters

Premelting temperature		1099	°C
Casting Temperature	Min: Max:	1049 1149	°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