

TECHNICAL DATA SHEET

SPARK690H + Ag13% - 875 ‰

Master alloy for the production of yellow 875 ‰ 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. The use is suggested with the addition of 10 - 20 ‰ of pure silver to the master alloy.

TAB.1 - Mechanical data

Hardness as cast	115	HV
Hardness hardened	n.d.	
Tensile strength	n.d.	
Yield strength	n.d.	
Elongation	n.d.	

TAB.2 - Physical data

Color	Deep yellow		
Colour Coordinates	L*:	86.20	
	a*:	8.60	
	b*:	21.60	
Density	16.60	g/cm ³	
Melting Range	Solidus:	900	°C
	Liquidus:	955	°C

TAB.3 - Heat treatments

Solution annealing	675 20	°C min
Recrystallization Annealing	675 20	°C min
Hardening	n.d.	

TAB.4 - Investment casting parameters

Premelting temperature		1055	°C
Casting Temperature	Min: Max:	1005 1105	°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