

TECHNICAL DATA SHEET

SPARK688L + Ag28% - 585 ‰

Master alloy for the production of yellow 585 ‰ 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 20 - 40 % of pure silver to the master alloy.

TAB.1 - Mechanical data

Hardness as cast	140	HV
Hardness hardened	239	HV
Tensile strength	365	MPa
Yield strength	238	MPa
Elongation	44	%

TAB.2 - Physical data

Color	Pale yellow		
Colour Coordinates	L*:	89.41	
	a*:	4.15	
	b*:	18.77	
Density	13.01	g/cm ³	
Melting Range	Solidus:	795	°C
	Liquidus:	857	°C

TAB.3 - Heat treatments

Solution annealing	675 20	°C min
Recrystallization Annealing	675 20	°C min
Hardening	275	°C
	180	min

TAB.4 - Investment casting parameters

Premelting temperature		957	°C
Casting Temperature	Min: Max:	907 1007	°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