

## TECHNICAL DATA SHEET

### PRIMA318H - 917 ‰

Master alloy for the production of yellow 875 - 917 ‰ gold jewellery obtained by investment casting. This product, thanks to its complex composition made of numerous different special elements, ensures an extreme level of deoxidation, an extreme surface quality, an enhanced fluidity and a long lasting of this features also after many reuses of casting scraps, making it the most advanced solution for castings with and without stones in place.

TAB.1 - Mechanical data

Hardness as cast	96	HV
Hardness hardened	n.d.	
Tensile strength	320	MPa
Yield strength	155	MPa
Elongation	28	%

TAB.2 - Physical data

Color	Deep yellow		
Colour Coordinates	L*:	86.51	
	a*:	8.81	
	b*:	24.02	
Density	17.42	g/cm <sup>3</sup>	
Melting Range	Solidus:	944	°C
	Liquidus:	963	°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		1063	°C
Casting Temperature	Min: Max:	1013 1113	°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