

## TECHNICAL DATA SHEET

### PRIMA197HPLUS - 750 ‰

Master alloy for the production of red 750 ‰ 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	212	HV
Hardness hardened	347	HV
Tensile strength	458	MPa
Yield strength	326	MPa
Elongation	46	%

TAB.2 - Physical data

Color	Deep red		
Colour Coordinates	L*:	85.96	
	a*:	10.02	
	b*:	15.86	
Density	14.75	g/cm3	
Melting Range	Solidus:	911	°C
	Liquidus:	918	°C

TAB.3 - Heat treatments

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

TAB.4 - Investment casting parameters

Premelting temperature		1018	°C
Casting Temperature	Min:	968	°C
	Max:	1068	°C
Water investment powder ratio		36-38	%
Flask temperature	Min:	450	°C
	Max:	700	°C
Quenching time without stones in place	Min:	5	min
	Max:	20	min
Quenching time with stones in place		15	min in boiling water
Pickling	H2SO4:	20	%
	Temp:	50	°C
	Time:	50	min