

TECHNICAL DATA SHEET

PLAST693R + Ag4% - 750 ‰

Master alloy for the production of red 375 - 417 - 585 - 750 - 917 ‰ gold jewellery obtained by mechanical working. The elements contained in this product ensure a high surface quality and a high deformation capability thanks the small grain structure, making it suitable for the production of hand and machine made hollow and solid chains, deep drawn items and tube. The use is suggested with the addition of 0 - 20 % of pure silver to the master alloy.

TAB.1 - Mechanical data

Hardness as cast	221	HV
Hardness hardened	330	HV
Tensile strength	585	MPa
Yield strength	371	MPa
Elongation	28	%

TAB.2 - Physical data

Color	Deep red		
Colour Coordinates	L*	85.52	
	a*	9.45	
	b*	16.05	
Density	16.74	g/cm ³	
Melting Range	Solidus:	900	°C
	Liquidus:	909	°C

TAB.3 - Heat treatments

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

TAB.4 - Mechanical working parameters

Premelting temperature		1009	°C
Casting Temperature	Min:	959	°C
	Max:	1059	°C
First thickness reduction	Lamination:	50	%
	Drawing:	25	%
Following thickness reductions	Lamination:	75	%
	Drawing:	50	%
Pickling after annealing	H2SO4:	20	%
	Temp:	50	°C
	Time:	5	min