

## TECHNICAL DATA SHEET

### PLAST682R + Ag20% - 585 ‰

Master alloy for the production of yellow 375 - 417 - 585 - 750 - 875 - 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 - 40 % of pure silver to the master alloy.

TAB.1 - Mechanical data

Hardness as cast	141	HV
Hardness hardened	194	HV
Tensile strength	466	MPa
Yield strength	271	MPa
Elongation	43	%

TAB.2 - Physical data

Color	Hamilton yellow		
Colour Coordinates	L*:	89.51	
	a*:	2.69	
	b*:	19.24	
Density	12.92	g/cm <sup>3</sup>	
Melting Range	Solidus:	814	°C
	Liquidus:	865	°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		965	°C
Casting Temperature	Min:	915	°C
	Max:	1015	°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