

TECHNICAL DATA SHEET

PLAST315L - 375 ‰

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.

TAB.1 - Mechanical data

| | | |
|-------------------|-----|-----|
| Hardness as cast | 110 | HV |
| Hardness hardened | 160 | HV |
| Tensile strength | 493 | MPa |
| Yield strength | 255 | MPa |
| Elongation | 34 | % |

TAB.2 - Physical data

| | | | |
|--------------------|-------------|-------------------|----|
| Color | Deep yellow | | |
| Colour Coordinates | L*: | 91.27 | |
| | a*: | 1.99 | |
| | b*: | 18.64 | |
| Density | 11.05 | g/cm ³ | |
| Melting Range | Solidus: | 817 | °C |
| | Liquidus: | 903 | °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 | | 1003 | °C |
| Casting Temperature | Min: | 953 | °C |
| | Max: | 1053 | °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 |