

## TECHNICAL DATA SHEET

### PRIMA310H - 585

Master alloy for the production of yellow 375 - 417 - 585 - 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	125 HV
Hardness hardened	n.d.
Tensile strength	n.d.
Yield strength	n.d.
Elongation	n.d.

TAB.2 - Physical data

Color	Deep yellow
Colour Coordinates	L*: 89.60 a*: 4.30 b*: 18.60
Density	12.80 g/cm <sup>3</sup>
Melting Range	Solidus: 855 °C Liquidus: 895 °C

TAB.3 - Heat treatments

Solution annealing	675 °C - 20 min
Recrystallization Annealing	700 °C - 30 min
Hardening	275 °C - 180 min

TAB.4 - Investment casting parameters

Premelting temperature	995 °C
Casting Temperature	Min: 945 °C Max: 1045 °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	H <sub>2</sub> SO <sub>4</sub> : 20 % Temp: 50 °C - 5 min