

GENERAL INFORMATION
General information

Production process	Universal
Color	Red
Color shade	Pink yellow
Typology	Master alloy for gold

Melting temperatures

Liquidus [°C]	935.0
Solidus [°C]	910.0
Melting range [°C]	25.0

Commercial composition

Silver (%)	18,00
Copper (%)	81,00
Zinc (%)	1,00



GOLD line

FULL CHARACTERIZATION DATA
Color coordinates

L*	85.9
a*	9.7
b*	21.5
c*	23.6

Physical characteristics

Density [g/cm ³]	16.6
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General characteristics

As cast grain size [μm]	35.0
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Product applications

Hand production
Massive chain production
Stamping production
Sheet production
Ingot casting
Casting in closed systems
Continuous casting
Wire production
Casting without stones

Mechanical characteristics

As cast hardness [HV 0.2]	115.0
Hardness after annealing [HV 0.2]	120.0
Hardness after 70% area red. [HV 0.2]	215.0
Tensile strength (Rm) [Mpa]	458.0
Yield strength (Rp0.2) [MPa]	250.0
Elongation at rupture (A) [%]	33.0

CASTING PROCESSING PARAMETERS

Pre-mixing temperature [°C] 1055.0

CASTING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	650.0	700.0	1025.0	1055.0
0.5 - 1.2 mm	600.0	650.0	1005.0	1025.0
> 1.2 mm	550.0	600.0	985.0	1005.0

Trees without stones

Let the flask cool down for 10-15 minutes, then quench in water.

Stone-in-place casting trees

Let the flask cool down for 30-45 minutes, then quench in water.

Pickling

Dip in RADIAL solution (50 g/l conc. at 60°C for 2 min.), or in sulphuric acid (10% conc. at 50°C for 5 min.)

MECHANICAL WORKING PARAMETERS

Pre-mixing temperature [°C] 1055.0

Reductions

Sheet - area or thickness (%)	75.0
Wire - diameter (%)	45.0

POURING TEMPERATURES	Countinous from [°C]	Countinous to [°C]	Ingot from [°C]	Ingot to [°C]
Temperatures	1035.0	1115.0	1015.0	1055.0

MECHANICAL WORKING ANNEALING	Temp. from [°C]	Temp. to [°C]	Time [min]
<1 mm	620.0	660.0	20.0
1 - 5 mm	620.0	660.0	25.0
>5 mm	620.0	660.0	30.0

Mechanical working quenching

Quench directly in a 50% water/50% alcohol solution or in water