

GENERAL INFORMATION
General information

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

Melting temperatures

Liquidus [°C]	920.0
Solidus [°C]	905.0
Melting range [°C]	15.0

Commercial composition

Silver (%)	5,00
Copper (%)	92,00
Zinc (%)	3,00



GOLD line

FULL CHARACTERIZATION DATA
Color coordinates

L*	86.8
a*	9.6
b*	15.4
c*	18.1

Physical characteristics

Density [g/cm ³]	14.7
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General characteristics

As cast grain size [μm]	60.0
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Product applications

Sheet production
Casting without stones
Blanking production
Massive chain production
TIG tube production
Wire production
Stamping production
Continuous casting
Casting in closed systems
CNC and lathe production

Mechanical characteristics

As cast hardness [HV 0.2]	185.0
Hardness after annealing [HV 0.2]	180.0
Hardness after 70% area red. [HV 0.2]	290.0
Single step age-hardening hardness [HV 0.2]	335.0
Tensile strength (Rm) [Mpa]	531.0
Yield strength (Rp0.2) [MPa]	378.0
Elongation at rupture (A) [%]	29.0

RELATED PRODUCTS LIST
Related Products

GFRED	Red gold flash solution for bath plating 0.8 g/l (ready-to-use)
LSR490	Master alloy for soldering of 375-585-750‰ (9-14-18 Kt) red gold

CASTING PROCESSING PARAMETERS

Pre-mixing temperature [°C] 1040.0

CASTING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	660.0	720.0	1020.0	1050.0
0.5 - 1.2 mm	580.0	650.0	1000.0	1020.0
> 1.2 mm	460.0	600.0	980.0	1000.0

Trees without stones

Remove the flask within 1 minute after pouring, then quench immediately in water.

Stone-in-place casting trees

Remove the flask immediately from the machine. Dip only the bottom part of the tree in cold water and keep under ventilation for 15 minutes. Quench in warm 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] 1040.0

Reductions

Sheet - area or thickness (%)	70.0
Wire - diameter (%)	45.0

POURING TEMPERATURES	Countinous from [°C]	Countinous to [°C]	Ingot from [°C]	Ingot to [°C]
Temperatures	1020.0	1100.0	1000.0	1040.0

MECHANICAL WORKING ANNEALING	Temp. from [°C]	Temp. to [°C]	Time [min]
<1 mm	620.0	660.0	25.0
1 - 5 mm	620.0	660.0	30.0
>5 mm	620.0	660.0	35.0

Mechanical working quenching

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

AGE HARDENING PROCESSING PARAMETERS

SINGLE STEP AGE-HARDENING TREATMENT	Temperature [°C]	Time [min]	Quenching
Age-hardening	250.0	90.0	Air or in furnace