

GENERAL INFORMATION
General information

Color	Yellow
Production process	Universal
Color shade	Rich yellow
Typology	Master alloy for gold

Melting temperatures

Liquidus [°C]	900.0
Solidus [°C]	874.0
Melting range [°C]	26.0

Commercial composition

Silver (%)	50,00
Copper (%)	50,00



GOLD line

FULL CHARACTERIZATION DATA
Color coordinates

L*	86.0
a*	5.3
b*	23.8
c*	24.4

General characteristics

As cast grain size [µm]	70
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Mechanical characteristics

As cast hardness [HV 0.2]	140.0
Hardness after annealing [HV 0.2]	155.0
Hardness after 70% area red. [HV 0.2]	250.0
Single step age-hardening hardness [HV 0.2]	244.0
Tensile strength (Rm) [Mpa]	427.0
Yield strength (Rp0.2) [MPa]	298.0
Elongation at rupture (A) [%]	42.0

Product applications

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

CASTING PROCESSING PARAMETERS

Pre-mixing temperature [°C] 1020.0

CASTING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	660.0	720.0	1000.0	1030.0
0.5 - 1.2 mm	580.0	650.0	980.0	1000.0
> 1.2 mm	460.0	600.0	960.0	980.0

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] 1020.0

Reductions

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

POURING TEMPERATURES	Countinous from [°C]	Countinous to [°C]	Ingot from [°C]	Ingot to [°C]
Temperatures	1000.0	1080.0	980.0	1020.0

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 water

AGE HARDENING PROCESSING PARAMETERS

SINGLE STEP AGE-HARDENING TREATMENT	Temperature [°C]	Time [min]	Quenching
Age-hardening	275.0	90.0	Air or in furnace