

**GENERAL INFORMATION**
**General information**

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

**Melting temperatures**

Liquidus [°C]	935.0
Solidus [°C]	885.0
Melting range [°C]	50.0

**Commercial composition**

Silver (%)	64,00
Copper (%)	36,00



GOLD line

**FULL CHARACTERIZATION DATA**
**Color coordinates**

L*	87.6
a*	3.0
b*	24.7
c*	24.9

**General characteristics**

As cast grain size [µm]	65
-------------------------	----

**Mechanical characteristics**

As cast hardness [HV 0.2]	120.0
Hardness after annealing [HV 0.2]	130.0
Hardness after 70% area red. [HV 0.2]	235.0
Single step age-hardening hardness [HV 0.2]	175.0
Tensile strength (Rm) [Mpa]	392.0
Yield strength (Rp0.2) [MPa]	258.0
Elongation at rupture (A) [%]	45.0

**Product applications**

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] 1055.0

CASTING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	660.0	720.0	1035.0	1065.0
0.5 - 1.2 mm	580.0	650.0	1015.0	1035.0
> 1.2 mm	460.0	600.0	995.0	1015.0

**Trees without stones**

Let the flask cool down in the chamber for 1 minute after pouring. Take the flask out of the machine without shaking it, let it cool for 25 minutes in air, 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**

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	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	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