

GENERAL INFORMATION
General information

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

Melting temperatures

Liquidus [°C]	895.0
Solidus [°C]	860.0
Melting range [°C]	35.0

Commercial composition

Zinc (%)	2,00
Copper (%)	51,00
Silver (%)	47,00

GOLD line

FULL CHARACTERIZATION DATA
Color coordinates

L*	86.9
a*	5.0
b*	22.6
c*	23.1

Physical characteristics

Density [g/cm ³]	15.1
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Mechanical characteristics

As cast hardness [HV 0.2]	130.0
Hardness after annealing [HV 0.2]	150.0
Hardness after 70% area red. [HV 0.2]	255.0
Single step age-hardening hardness [HV 0.2]	250.0
Tensile strength (Rm) [Mpa]	424.0
Yield strength (Rp0.2) [MPa]	269.0
Elongation at rupture (A) [%]	38.0

Product applications

Sheet production
Wire production
Massive chain production
Ingot casting
Blanking production
Stamping production
Production of tube from continuous casting
Continuous casting
Hollow chain production
CNC and lathe production
Cladding production
TIG tube production
Age-hardening

RELATED PRODUCTS LIST
Related Products

L1A	Powder for soldering of gold and silver chains
LSG406B	Master alloy for soldering of 750‰ (18 Kt) yellow gold
LSG409V	Master alloy for soldering of 750‰ (18 Kt) yellow gold

Alternative Products

Y142W	Master alloy for mechanical working of 750‰ (18 Kt) yellow gold
C183N	Master alloy for casting of 750‰ (18 Kt) yellow gold

CASTING PROCESSING PARAMETERS

Pre-mixing temperature [°C] 1015.0

CASTING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	660.0	720.0	995.0	1025.0
0.5 - 1.2 mm	580.0	650.0	975.0	995.0
> 1.2 mm	460.0	600.0	955.0	975.0

Trees without stones

Let the flask cool down for 5 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] 1015.0

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	995.0	1075.0	975.0	1015.0

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	275.0	90.0	Air or in furnace