

GENERAL INFORMATION
General information

Color	Yellow
Production process	Universal
Typology	Pre-master alloy for gold
Color shade	Light yellow

Melting temperatures

Liquidus [°C]	935.0
Solidus [°C]	884.0
Melting range [°C]	51.0

Commercial composition

Copper (%)	99,00
Zinc (%)	1,00



GOLD line

FULL CHARACTERIZATION DATA
Color coordinates

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

Physical characteristics

Density [g/cm ³]	15.2
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General characteristics

As cast grain size [μm]	70.0
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Product applications

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

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

RELATED PRODUCTS LIST
Related Products

LSG409V	Master alloy for soldering of 750‰ (18 Kt) yellow gold
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Alternative Products

C182N	Master alloy for casting of 750‰ (18 Kt) yellow gold
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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

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	1035.0	1115.0	1015.0	1055.0

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