

**GENERAL INFORMATION**
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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

**Physical characteristics**

Density [g/cm <sup>3</sup> ]	15.2
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**General characteristics**

As cast grain size [μm]	65.0
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**Product applications**

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

LSG406B	Master alloy for soldering of 750‰ (18 Kt) yellow gold
LSG409	Master alloy for soldering of 585‰ (14 Kt) yellow gold
LSG409D	Master alloy for soldering of 585‰ (14 Kt) yellow gold
LSG409V	Master alloy for soldering of 750‰ (18 Kt) yellow gold

**Alternative Products**

B182N	Master alloy for mechanical working of 750‰ (18 Kt) yellow gold
C182N	Master alloy for casting of 750‰ (18 Kt) yellow gold

**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 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] 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	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