

**GENERAL INFORMATION**
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Color	Yellow
Typology	Master alloy for gold
Color shade	Light yellow
Production process	Casting

**Melting temperatures**

Liquidus [°C]	910.0
Solidus [°C]	860.0
Melting range [°C]	50.0

**Commercial composition**

Silver (%)	58,00
Copper (%)	39,00
Zinc (%)	3,00



GOLD line

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

L*	87.9
a*	2.6
b*	23.5
c*	23.7

**General characteristics**

As cast grain size [µm]	300.0
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**Mechanical characteristics**

As cast hardness [HV 0.2]	130.0
Hardness after annealing [HV 0.2]	140.0
Hardness after 70% area red. [HV 0.2]	200.0
Single step age-hardening hardness [HV 0.2]	195.0
Tensile strength (Rm) [Mpa]	352.0
Yield strength (Rp0.2) [MPa]	249.0
Elongation at rupture (A) [%]	44.0

**Product applications**

Casting in open systems
Age-hardening
Stone-in-place casting
Casting in closed systems
Casting without stones

**RELATED PRODUCTS LIST**
**Related Products**

LSG406B	Master alloy for soldering of 750‰ (18 Kt) yellow gold
LSG409V	Master alloy for soldering of 750‰ (18 Kt) yellow gold

**Alternative Products**

C182D	Master alloy for casting of 750‰ (18 Kt) yellow gold
C182N1	Master alloy for casting of 750‰ (18 Kt) yellow gold

**CASTING PROCESSING PARAMETERS**

Pre-mixing temperature [°C] 1030.0

CASTING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	660.0	720.0	1010.0	1040.0
0.5 - 1.2 mm	580.0	650.0	990.0	1010.0
> 1.2 mm	460.0	600.0	970.0	990.0

**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.)

**AGE HARDENING PROCESSING PARAMETERS**

SINGLE STEP AGE-HARDENING TREATMENT	Temperature [°C]	Time [min]	Quenching
Age-hardening	250.0	90.0	Air or in furnace