

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

**Melting temperatures**

Liquidus [°C]	870.0
Solidus [°C]	810.0
Melting range [°C]	60.0

**Commercial composition**

Silver (%)	16,00
Copper (%)	69,00
Zinc (%)	15,00



GOLD line

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

L*	88.2
a*	2.7
b*	17.0
c*	18.1

**Physical characteristics**

Density [g/cm <sup>3</sup> ]	12.9
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**Product applications**

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

**Mechanical characteristics**

As cast hardness [HV 0.2]	110.0
Single step age-hardening hardness [HV 0.2]	150.0

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

LSG409	Master alloy for soldering of 585‰ (14 Kt) yellow gold
LSG409D	Master alloy for soldering of 585‰ (14 Kt) yellow gold
LSG417F	Master alloy for soldering of 375-585‰ (9-14 Kt) yellow gold
LSG419	Master alloy for soldering of 375‰ (9Kt) yellow gold

**Alternative Products**

SCA5	Master alloy for casting of 375-585‰ (9-14 Kt) yellow gold
C141US	Master alloy for casting of 375-585‰ (9-14 Kt) yellow gold

**CASTING PROCESSING PARAMETERS**

**Pre-mixing temperature [°C]** 990.0

CASTING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	660.0	720.0	970.0	1000.0
0.5 - 1.2 mm	580.0	650.0	950.0	970.0
> 1.2 mm	460.0	600.0	930.0	950.0

**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