

GENERAL INFORMATION
General information

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

Melting temperatures

Liquidus [°C]	930.0
Solidus [°C]	825.0
Melting range [°C]	105.0

Commercial composition

Silver (%)	12,50
Copper (%)	70,50
Zinc (%)	17,00



GOLD line

FULL CHARACTERIZATION DATA
Color coordinates

L*	87.2
a*	1.6
b*	17.8
c*	17.9

General characteristics

As cast grain size [µm]	800.0
-------------------------	-------

Product applications

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

Mechanical characteristics

As cast hardness [HV 0.2]	100.0
Hardness after annealing [HV 0.2]	125.0
Hardness after 70% area red. [HV 0.2]	205.0
Single step age-hardening hardness [HV 0.2]	120.0
Tensile strength (Rm) [Mpa]	481.0
Yield strength (Rp0.2) [MPa]	244.0
Elongation at rupture (A) [%]	30.0

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

OG130A	Master alloy for casting of 375-585‰ (9-14 Kt) yellow gold
B145	Master alloy for mechanical working of 375-585‰ (9-14 Kt) yellow gold

CASTING PROCESSING PARAMETERS

Pre-mixing temperature [°C] 1050.0

CASTING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	660.0	720.0	1030.0	1060.0
0.5 - 1.2 mm	580.0	650.0	1010.0	1030.0
> 1.2 mm	460.0	600.0	990.0	1010.0

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
	350.0	90.0	Air or in furnace