

GENERAL INFORMATION
General information

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

Melting temperatures

Liquidus [°C]	900.0
Solidus [°C]	865.0
Melting range [°C]	35.0

Commercial composition

Silver (%)	47,00
Copper (%)	50,00
Zinc (%)	3,00



GOLD line

FULL CHARACTERIZATION DATA
Color coordinates

L*	86.2
a*	4.7
b*	23.1
c*	23.6

General characteristics

As cast grain size [µm]	400
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Mechanical characteristics

As cast hardness [HV 0.2]	135.0
Hardness after annealing [HV 0.2]	155.0
Hardness after 70% area red. [HV 0.2]	270.0
Single step age-hardening hardness [HV 0.2]	245.0
Tensile strength (Rm) [Mpa]	380.0
Yield strength (Rp0.2) [MPa]	290.0
Elongation at rupture (A) [%]	40.0

Product applications

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

CASTING PROCESSING PARAMETERS

Pre-mixing temperature [°C] 1020.0

CASTING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	660.0	720.0	1000.0	1030.0
0.5 - 1.2 mm	580.0	650.0	980.0	1000.0
> 1.2 mm	460.0	600.0	960.0	980.0

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	275.0	90.0	Air or in furnace