

GENERAL INFORMATION
General information

Production process	Universal
Color	Red
Color shade	Pink
Typology	Master alloy for gold

Melting temperatures

Liquidus [°C]	890.0
Solidus [°C]	870.0
Melting range [°C]	20.0

Commercial composition

Silver (%)	18,00
Copper (%)	77,00
Zinc (%)	5,00



GOLD line

FULL CHARACTERIZATION DATA
Color coordinates

L*	87.7
a*	7.6
b*	17.9
c*	19.4

General characteristics

As cast grain size [µm]	25.0
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Mechanical characteristics

As cast hardness [HV 0.2]	190.0
Hardness after annealing [HV 0.2]	180.0
Hardness after 70% area red. [HV 0.2]	290.0
Single step age-hardening hardness [HV 0.2]	320.0
Tensile strength (Rm) [Mpa]	477.0
Yield strength (Rp0.2) [MPa]	318.0
Elongation at rupture (A) [%]	34.0

Product applications

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

RELATED PRODUCTS LIST
Related Products

CUT10X2	Copper tube, 10.0 mm diameter, 2.0 mm wall thickness, 2500 mm length, cold worked
L1A	Powder for soldering of gold and silver chains
LSR490	Master alloy for soldering of 375-585-750‰ (9-14-18 Kt) red gold
LSR500	Master alloy for soldering of 585-750‰ (14-18 Kt) red gold

Alternative Products

YA223W	All-purpose master alloy for 875-917‰ (21-22 Kt) yellow gold
YA22U	All-purpose master alloy for 375-585-750-917‰ (9-14-18-22 Kt) yellow gold

CASTING PROCESSING PARAMETERS

Pre-mixing temperature [°C] 1010.0

CASTING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	650.0	720.0	980.0	1010.0
0.5 - 1.2 mm	600.0	650.0	960.0	980.0
> 1.2 mm	560.0	600.0	940.0	960.0

Trees without stones

Remove the flask within 1 minute after pouring, then quench immediately in water.

Stone-in-place casting trees

Remove the flask immediately from the machine. Dip only the bottom part of the tree in cold water and keep under ventilation for 15 minutes. Quench in warm 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] 1010.0

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	1000.0	1070.0	980.0	1020.0

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 a 50% water/50% alcohol solution or 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