

GENERAL INFORMATION
General information

Typology	Master alloy for gold
Color	Yellow
Color shade	Light yellow
Production process	All-purpose
Grain refinement level	High
Deoxidation level	Minimum

Commercial composition (%)

CU	51.0
AG	46.5
ZN	2.5

Melting Temperatures

Solidus [°C]	795.0
Liquidus [°C]	820.0
Melting range [°C]	25.0

FULL CHARACTERIZATION DATA
Color coordinates

L *	a*	b*	c*	Yellow Index
90.2	3.7	17.8	18.2	

Mechanical characteristics

As cast hardness [HV 0.2]	225.0
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Physical characteristics

Density [g/cm ³]	13.0
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General characteristics

As cast grain size [μm]	60.0
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Product applications

Continuous casting
 Ingot casting
 Wire production
 Sheet production

CASTING PROCESSING PARAMETERS
Pre-melting temperature

Temperature [°C] 950

POURING TEMPERATURES

	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	660	720	920	950
0.5 - 1.2 mm	580	650	900	920
> 1.2 mm	460	600	880	900

Trees without stones

Let the flask cool down for 5 minutes, then quench it in water.

Pickling

Dip in RADIAL solution (50 g/l conc. at 60°C) for 2 minutes, or in sulphuric acid (10% concentration at 50°C) for 5 minutes.

MECHANICAL WORKING PARAMETERS
Pre-melting temperature

Temperature [°C] 950

Reductions

Wire - diameter (%)	45.0
Sheet - area or thickness (%)	75.0

POURING TEMPERATURES
Countinous from [°C]
Countinous to [°C]
Ingot to [°C]
Ingot from [°C]

Temperatures	930	1010	910	950
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MECHANICAL WORKING ANNEALING
Temp. from [°C]
Temp. to [°C]
Time [min]

< 1 mm	620	660	25
1 - 5 mm	620	660	30
> 5 mm	620	660	35

Mechanical working quenching

Quench directly in 50%/50% water/alcohol solution or in water.

B183N 585‰

ALL-PURPOSE MASTER ALLOY FOR 750‰ (18 KT) YELLOW GOLD

AGE HARDENING PROCESSING PARAMETERS

SINGLE STEP	Temperature [°C]	Time [min]	Quenching
AGE HARDENING	275.0	90.0	In air or in furnace