

GENERAL INFORMATION
General information

Typology	Master alloy for gold
Color	White
Color shade	Standard white
Production process	Casting
Grain refinement level	Medium
Deoxidation level	High

Commercial composition (%)

CU	57.8
NI	20.0
ZN	20.0
AG	2.2

Melting Temperatures

Solidus [°C]	900.0
Liquidus [°C]	955.0
Melting range [°C]	55.0

FULL CHARACTERIZATION DATA
Color coordinates

L *	a*	b*	c*	Yellow Index
84.7	1.0	9.5	9.6	20.2

Mechanical characteristics

As cast hardness [HV 0.2]	145.0
Hardness after 70% area red. [HV 0.2]	325.0
Hardness after annealing [HV 0.2]	165.0
Single step age-hardening hardness [HV 0.2]	180.0
Tensile strength (Rm) [Mpa]	605.0
Yield strength (Rp0.2) [MPa]	372.0
Elongation at rupture (A) [%]	34.0

Physical characteristics

Density [g/cm ³]	12.8
------------------------------	------

General characteristics

As cast grain size [μm]	720.0
-------------------------	-------

Product applications

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

CASTING PROCESSING PARAMETERS

POURING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	660	720	1055	1085
0.5 - 1.2 mm	580	650	1035	1055
> 1.2 mm	460	600	1015	1035

Trees without stones

Let the flask cool down for 10-15 minutes, then quench it in water.

Stone-in-place casting trees

Let the flask cool down for 45-60 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.