

GENERAL INFORMATION
General information

Color	Silver
Typology	Master alloy for silver
Production process	Casting

Melting temperatures

Liquidus [°C]	900.0
Solidus [°C]	730.0
Melting range [°C]	170.0

Commercial composition

Copper (%)	72,00
Zinc (%)	28,00


SILVER line
FULL CHARACTERIZATION DATA
Color coordinates

L*	93.9
a*	-0.6
b*	6.2
c*	6.2
Yellow index	12.0

General characteristics

As cast grain size [µm]	180.0
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Mechanical characteristics

As cast hardness [HV 0.2]	50.0
Hardness after annealing [HV 0.2]	70.0
Hardness after 70% area red. [HV 0.2]	160.0
Double step age-hardening hardness [HV 0.2]	110.0
Tensile strength (Rm) [Mpa]	251.0
Yield strength (Rp0.2) [MPa]	113.0
Elongation at rupture (A) [%]	26.0

Product applications

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	560.0	600.0	1000.0	1030.0
0.5 - 1.2 mm	520.0	560.0	980.0	1000.0
> 1.2 mm	480.0	520.0	960.0	980.0

Trees without stones

Let the flask cool down in the chamber for 1 minute after pouring. Take the flask out of the machine without shaking it, let it cool for 15 minutes in air, then quench it 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.)

DOUBLE STEP AGE-HARDENING TREATMENT	Temperature [°C]	Time [min]	Quenching
Solubilization	650.0	40.0	Water, immediate
Age-hardening	300.0	60.0	Air or in furnace