

**GENERAL INFORMATION**
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Color shade	Russian red
Color	Red
Typology	Master alloy for gold
Production process	Casting

**Melting temperatures**

Liquidus [°C]	890.0
Solidus [°C]	840.0
Melting range [°C]	50.0

**Commercial composition**

Silver (%)	16,00
Copper (%)	82,00
Zinc (%)	2,00



GOLD line

**FULL CHARACTERIZATION DATA**
**Color coordinates**

L*	83.7
a*	7.2
b*	15.3
c*	16.9

**Physical characteristics**

Density [g/cm <sup>3</sup> ]	13.0
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**General characteristics**

As cast grain size [μm]	200.0
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**Product applications**

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

**Mechanical characteristics**

As cast hardness [HV 0.2]	160.0
Hardness after annealing [HV 0.2]	150.0
Hardness after 70% area red. [HV 0.2]	290.0
Single step age-hardening hardness [HV 0.2]	180.0
Tensile strength (Rm) [Mpa]	478.0
Yield strength (Rp0.2) [MPa]	286.0
Elongation at rupture (A) [%]	36.0

**RELATED PRODUCTS LIST**
**Related Products**

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**

OR129C	Master alloy for casting of 375-585‰ (9-14 Kt) red gold
OR129W	Master alloy for mechanical working of 375-585-750‰ (9-14-18 Kt) red 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	660.0	720.0	990.0	1020.0
0.5 - 1.2 mm	580.0	650.0	970.0	990.0
> 1.2 mm	460.0	600.0	950.0	970.0

**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
	250.0	90.0	Air or in furnace