

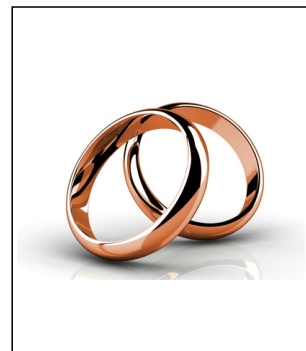
TECHNICAL DATASHEET AND GUIDELINE**OR134**
Title 9 Kt**All-purpose master alloy for 375-585-750‰ (9-14-18 Kt) red gold**

TECHNICAL DATASHEET AND GUIDELINE
OR134
 Title 9 Kt

All-purpose master alloy for 375-585-750‰ (9-14-18 Kt) red gold
GENERAL INFORMATION

Typology	Master alloy for gold
Production process	Universal
Color	Red
Color shade	Red
Density [g/cm ³]	11.1
Melting temperatures	
Solidus [°C]	950
Liquidus [°C]	985

Commercial composition	
Ag (%)	6
Cu (%)	92
Zn (%)	2


FULL CHARACTERIZATION DATA

General characteristics	
As cast grain size [µm]	270
Color coordinates	
L*	85
a*	9.6
b*	14.3
c*	16.9

Mechanical characteristics	
Tensile strength (Rm) [MPa]	414
Yield strength (Rp0.2) [MPa]	208
Elongation at rupture (A) [%]	29
As cast hardness [HV 0.2]	100
Hardness after 70% area red. [HV 0.2]	238
Hardness after annealing [HV 0.2]	120
Single step age-hardening hardness [HV 0.2]	109

PRODUCT APPLICATIONS

Casting in closed systems
Casting without stones
Continuous casting
Sheet production
Wire production
Massive chain production
Stamping production
TIG tube production

RELATED PRODUCTS

GFRED	Deep red gold flash plating bath
LSR490	Medium solder for 750‰ red gold

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CASTING PROCESSING PARAMETERS

Casting temperatures	Metal - from [°C]	Metal - to [°C]	Flask - from [°C]	Flask - to [°C]
Thin (below 0.5 mm)	1085	1115	660	720
Medium (from 0.5 to 1.2 mm)	1065	1085	580	650
Thick (above 1.2 mm)	1045	1065	460	600

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 water.

Trees without stones

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

MECHANICAL WORKING PARAMETERS

Casting temperature	Metal - from [°C]	Metal - to [°C]	Recommended reductions	
Ingot making	1065	1105	Sheet - area or thickness [%]	70
Continuous casting	1085	1165	Wire - diameter [%]	45

Mechanical working recommended annealing	Temperature - from [°C]	Temperature - to [°C]	Time [min]
> 5 mm	620	660	35
1 - 5 mm	620	660	30
< 1 mm	620	660	25