

**MASTER
ALLOY**
YA144L 585‰

MASTER ALLOY FOR MECHANICAL WORKING OF 375-585‰ (9-14 KT) YELLOW GOLD

GENERAL INFORMATION
General information

Color	Yellow
Production process	Mechanical working
Typology	Master alloy for gold
Color shade	Green yellow

Melting temperatures

Liquidus [°C]	885.0
Solidus [°C]	850.0
Melting range [°C]	35.0

Commercial composition

Copper (%)	71,50
Silver (%)	5,50
Zinc (%)	23,00



GOLD line

FULL CHARACTERIZATION DATA
Color coordinates

L*	90.8
a*	1.6
b*	19.8
c*	19.8

Physical characteristics

Density [g/cm ³]	12.6
------------------------------	------

General characteristics

As cast grain size [μm]	17.0
-------------------------	------

Product applications

Ingot casting
Stamping production
Massive chain production
Wire production
Sheet production
Continuous casting
Hand production

Mechanical characteristics

As cast hardness [HV 0.2]	115.0
Hardness after annealing [HV 0.2]	130.0
Hardness after 70% area red. [HV 0.2]	250.0

RELATED PRODUCTS LIST
Related Products

L1A	Powder for soldering of gold and silver chains
LSG409	Master alloy for soldering of 585‰ (14 Kt) yellow gold
LSG409D	Master alloy for soldering of 585‰ (14 Kt) yellow gold
LSG417F	Master alloy for soldering of 375-585‰ (9-14 Kt) yellow gold
LSG419	Master alloy for soldering of 375‰ (9Kt) yellow gold

Alternative Products

B145	Master alloy for mechanical working of 375-585‰ (9-14 Kt) yellow gold
------	---

MECHANICAL WORKING PARAMETERS

Pre-mixing temperature [°C] 1005.0

Reductions

Sheet - area or thickness (%)	70.0
Wire - diameter (%)	45.0

POURING TEMPERATURES

Countinous from [°C]

Countinous to [°C]

Ingot from [°C]

Ingot to [°C]

Temperatures

995.0

1065.0

965.0

1005.0

MECHANICAL WORKING ANNEALING

Temp. from [°C]

Temp. to [°C]

Time [min]

<1 mm

620.0

660.0

25.0

1 - 5 mm

620.0

660.0

30.0

>5 mm

620.0

660.0

35.0

Mechanical working quenching

Quench directly in water