

TECHNICAL DATASHEET AND GUIDELINE

LSG409V
Title 18 Kt

Master alloy for soldering of 750‰ (18 Kt) yellow gold

GENERAL INFORMATION

Typology	Solder for gold
Production process	Soldering
Color	Yellow
Color shade	Green yellow
Density [g/cm ³]	14.6
Melting temperatures	
Solidus [°C]	715
Liquidus [°C]	770

Commercial composition	
Ag (%)	38
Cu (%)	22
In (%)	9
Zn (%)	31



FULL CHARACTERIZATION DATA

General characteristics	
As cast grain size [µm]	215
Color coordinates	
L*	87.9
a*	-1.2
b*	19.4
c*	19.4

Mechanical characteristics	
Tensile strength (Rm) [MPa]	445
Yield strength (Rp0.2) [MPa]	362
Elongation at rupture (A) [%]	16
As cast hardness [HV 0.2]	183
Hardness after 70% area red. [HV 0.2]	221
Hardness after annealing [HV 0.2]	154

PRODUCT APPLICATIONS

Hollow chain production
Wire production
Belt furnace soldering

MECHANICAL WORKING PARAMETERS

Casting temperature	Temperature - from [°C]	Temperature - to [°C]	Recommended reductions	
Ingot making	850	890	Sheet - area or thickness [%]	40
Continuous casting	870	950	Wire - diameter [%]	15

Mechanical working recommended annealing	Temperature - from [°C]	Temperature - to [°C]	Time [min]
> 5 mm	530	560	30
1 - 5 mm	530	560	25
< 1 mm	530	560	20

