

LSB475 750‰

MASTER ALLOY FOR SOLDERING OF 750‰ (18 KT) WHITE GOLD

GENERAL INFORMATION
General information

Typology	Gold solder
Color	White
Color shade	Off-white
Production process	Brazing
Grain refinement level	Minimum
Deoxidation level	Minimum

Commercial composition (%)

CU	37.0
ZN	35.0
AG	12.0
IN	8.0
NI	8.0

Melting Temperatures

Solidus [°C]	715.0
Liquidus [°C]	800.0
Melting range [°C]	85.0

FULL CHARACTERIZATION DATA
Color coordinates

L *	a*	b*	c*	Yellow Index
85.2	-0.3	16.1	16.1	30.3

Mechanical characteristics

As cast hardness [HV 0.2]	180.0
Hardness after 70% area red. [HV 0.2]	195.0
Hardness after annealing [HV 0.2]	165.0
Tensile strength (Rm) [Mpa]	418.0
Yield strength (Rp0.2) [MPa]	306.0
Elongation at rupture (A) [%]	36.0

Physical characteristics

Density [g/cm ³]	14.3
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General characteristics

As cast grain size [μm]	280.0
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Product applications

MECHANICAL WORKING PARAMETERS
Pre-melting temperature

Temperature [°C] 925

Reductions

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

POURING TEMPERATURES

Countinous from [°C]

Countinous to [°C]

Ingot to [°C]

Ingot from [°C]

Temperatures

905

985

885

925

MECHANICAL WORKING ANNEALING

Temp. from [°C]

Temp. to [°C]

Time [min]

< 1 mm

560

580

20

> 5 mm

560

580

25

1 - 5 mm

560

580

30

Mechanical working quenching

Air cool down to 550°C, then quench in 50%/50% water/alcohol solution or in water.

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Preliminary checks

Please note that in order to correctly evaluate the alloy's hardness to solderability, it is advised to make a numerical calculation by subtracting the base metal solidus temperature value from the solder liquidus temperature value. The higher the number resulting, the more solderable (or the less hard) the alloy can be considered. Please refer to the technical guideline for solders available in the website for further information.