

**MASTER  
ALLOY**
**LSA440 925‰**

MASTER ALLOY FOR SOLDERING OF 925‰ SILVER

**GENERAL INFORMATION**
**General information**

Typology	Master alloy for silver
Color	Silver
Production process	Brazing
Grain refinement level	Minimum
Deoxidation level	Minimum

**Commercial composition (%)**

CU	55.0
ZN	45.0

**Melting Temperatures**

Solidus [°C]	675.0
Liquidus [°C]	695.0
Melting range [°C]	20.0

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

L *	a*	b*	c*	Yellow Index
87.3	-0.6	13.2		

**Mechanical characteristics**

As cast hardness [HV 0.2]	145.0
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**Physical characteristics**

Density [g/cm <sup>3</sup> ]	9.5
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**Product applications**

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**MECHANICAL WORKING PARAMETERS**
**Pre-melting temperature**

Temperature [°C] 815

**Reductions**

Wire - diameter (%)	40.0
Sheet - area or thickness (%)	60.0

**POURING TEMPERATURES**

Countinous from [°C]

Countinous to [°C]

Ingot to [°C]

Ingot from [°C]

Temperatures

795

875

775

815

**MECHANICAL WORKING ANNEALING**

Temp. from [°C]

Temp. to [°C]

Time [min]

&lt; 1 mm

500

520

15

&gt; 5 mm

500

520

20

1 - 5 mm

500

520

25

**Mechanical working quenching**

Quench directly 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.

**Notes on alloy title**

SOFT SOLDER: LSA440 35% + Ag 65%.

MEDIUM SOLDER: LSA440 25% + Ag 75%.

HARD SOLDER: LSA440 15% + Ag 85%.

The information contained in the technical datasheet refer to a solder containing 65% silver.