

SN100CL (SnCu0.7Ni)

Rev: 21.5

Date	2021.05.10
Language	English
SDS	950002



SUMMARY

Alloy SN100CL is a lead-free special alloy for hot air tinning of printed circuit boards (HAL lead-free / LFHASL).

ALLOY	SN100CL (SnCu0.7Ni)
PROCESS	
Leadfree	9
Leaded	1
First filling*	9
Refilling*	4

*follow Application Note

INDUSTRY APPLICATION	
Standard electronics	9
Industrial electronics	9
Hi-Rel electronics (automotive)	9

PROCESS CAPABILITY	
Wave soldering	1
Selective soldering	1
Dip soldering	6
Wire tinning	6
Process: Ambient	8
Process: N2 partial	N/A
Process: N2	N/A
Reduces dross	8
Reduces bridging	8
Improves PTH filling	N/A
Shiny joint appearance	9

Legend	
<i>Especially made for this purpose</i>	9 - 10
<i>Generally qualified for this purpose</i>	7 - 8
<i>Generally usable, but not the best choice</i>	5 - 6
<i>Generally not usable for this purpose</i>	3 - 4
<i>Wrong choice</i>	1 - 2

Check material compatibility with every process change.

Read AN before use.

Read MSDS before use.

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PROPERTIES	
Manufacturing standard	WBZ.: Triple X
Alloy Code	SN100CL
Alloy composition	SnCu0.7Ni
ANSI/J-STD-006C: 2013	compliant
DIN EN ISO 9453:2021-01	Alloy 403
Liquidus	[°C] 227
Solidus	[°C] 227
Recommended working range*	[°C] 260 - 320

*follow Application Note

COMPOSITION		
Tin	[Sn]	Remainder
Copper	[Cu]	0.6 - 0.7
Nickel	[Ni]	0.04 - 0.06
Germanium	[Ge]	0.005 - 0.007
Silver	[Ag]	max. 0.05
Aluminium	[Al]	max. 0.001
Arsenic	[As]	max. 0.03
Gold	[Au]	max. 0.03
Bismuth	[Bi]	max. 0.03
Cadmium	[Cd]	max. 0.002
Iron	[Fe]	max. 0.02
Indium	[In]	max. 0.03
Lead	[Pb]	max. 0.05
Antimony	[Sb]	max. 0.05
Zinc	[Zn]	max. 0.001

SHAPE AND DIMENSION*			
Ingot	1 kg	LxWxH [mm]	325x28x15
Ingot with loop	3.7 kg	LxWxH [mm]	540x50/40x20
	4 kg	LxWxH [mm]	515x50/48x22
Bar	Rectangle	[mm]	400x10x8
	Triangular	[mm]	400x10x10
Pellet		[mm]	12x25
Solid wire	ø	[mm]	1.0 - 6.0

*other dimensions on request