

SN100CLS (SnCu0.7NiGe)

Rev: 21.5

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Language	English
SDS	950002



SUMMARY

Alloy SN100CLS is a germanium-rich variant of SN100CL for use in lead-free hot air tinning of printed circuit boards (HASL).

ALLOY	SN100CLS (SnCu0.7NiGe)
PROCESS	
Leadfree	9
Leaded	1
First filling*	9
Refilling*	8

*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	9
Process: N2 partial	N/A
Process: N2 vull tunnel	N/A
Reduces dross	9
Reduces bridging	9
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.

PROPERTIES	
Manufacturing standard	WBZ.: Triple X
Alloy Code	SN100CLS
Alloy composition	SnCu0.7NiGe
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]	0.009 - 0.011
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

Disclaimer:

This information is intended as advice to the best of our knowledge. The provided data is based on our own measurements, they do not provide any guaranteed properties nor are these delivery specifications. Due to the versatility of materials, applications and taking in consideration the industrial property rights of third parties, Balver Zinn Josef Jost GmbH & Co. KG cannot take any liability.