

SN100Ce-SEL (SnCu0.4Ni0.02)

Rev: 21.5

Date 2025.08.26
Language English
SDS 950002



SUMMARY

The SN100Ce-SEL solder has been specially developed for the selective soldering process to counteract steadily increasing nickel and copper values.

ALLOY	SN100Ce-SEL (SnCu0.4Ni0.02)
PROCESS	
Leadfree	9
Leaded	1
First filling*	4
Refilling*	9

*follow Application Note

INDUSTRY APPLICATION	
Standard electronics	9
Industrial electronics	9
Hi-Rel electronics (automotive)	8

PROCESS CAPABILITY	
Wave soldering	8
Selective soldering	9
Dip soldering	8
Wire tinning	4
Process: Ambient	8
Process: N2 partial	9
Process: N2 vull tunnel	9
Reduces dross	8
Reduces bridging	9
Improves PTH filling	9
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.

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.

PROPERTIES		
Manufacturing standard	BZ Spec. No. 020 : 2018	
Alloy Code	SN100Ce-SEL	
Alloy composition	SnCu0.4Ni0.02	
ANSI/J-STD-006C: 2013	compliant	
DIN EN ISO 9453:2021-01	-	
Liquidus	[°C]	227
Solidus	[°C]	227
Recommended working range*	[°C]	260 - 320

*follow Application Note

COMPOSITION		
Tin	[Sn]	Remainder
Copper	[Cu]	0.3 - 0.4
Nickel	[Ni]	0.01 - 0.03
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
	3.7 kg	LxWxH [mm]	540x50/40x20
Ingot with loop	4 kg	LxWxH [mm]	515x50/48x22
	Rectangle	[mm]	400x10x8
Bar	Triangular	[mm]	400x10x10
		[mm]	12x25
Pellet		[mm]	1.0 - 6.0
Solid wire	ø	[mm]	

*other dimensions on request