Product data sheet

BALVER ZINN®

SN100CS+ (SnCu0.7Ni0.05Ge0.025)

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Language English
SDS 950002

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SUMMARY

Alloy SN100CS+ is a variant of the world famous lead-free SN100C with an increased germanium content of 250ppm (0.025%).

ALLOY	SN100CS+ (SnCu0.7Ni0.05Ge0.025)
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)	8

PROCESS CAPABILITY	
Wave soldering	9
Selective soldering	9
Dip soldering	9
Wire tinning	6
Process: Ambient	9
Process: N2 partial	9
Process: N2 vull tunnel	8
Reduces dross	10
Reduces bridging	10
Improves PTH filling	10
Shiny joint appearance	10

Legend	
Especially made for this purpose	9 - 10
Generally qualified for this purpose	7 - 8
Generally usable, but not the best choice	5 - 6
Generally not usable for this purpose	3 - 4
Wrong choice	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	SN100CS+	
Alloy composition	SnCu0.7Ni0.05Ge0.025	
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]	0.02 - 0.03
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	⌀	[mm]	1.0 - 6.0

*other dimensions on request