

SnBi28

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Language English

SDS 950013



SUMMARY

Alloy SnBi28 is a lead-free alloy with a melting range of 139-191°C for applications on temperature sensitive components.

ALLOY	SnBi28
PROCESS	
Leadfree	9
Leaded	1
First filling*	9
Refilling*	8

*follow Application Note

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

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

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. 024	
Alloy Code	SnBi28	
Alloy composition	SnBi28Ni0.05Ge0.005	
ANSI/J-STD-006C: 2013	not compliant	
DIN EN ISO 9453:2021-01	-	
Liquidus	[°C]	191
Solidus	[°C]	139
Recommended working range*	[°C]	200 - 225

*follow Application Note

COMPOSITION		
Tin	[Sn]	Remainder
Bismuth	[Bi]	27.5 - 28.5
Nickel	[Ni]	0.04 - 0.06
Germanium	[Ge]	0.005 - 0.009
Silver	[Ag]	max. 0.05
Aluminium	[Al]	max. 0.001
Arsenic	[As]	max. 0.03
Gold	[Au]	max. 0.03
Cadmium	[Cd]	max. 0.002
Copper	[Cu]	max. 0.05
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]	-
Ingot with loop	3.7 kg	LxWxH [mm]	-
	4 kg	LxWxH [mm]	-
Bar	Rectangle	[mm]	-
	Triangular	[mm]	400x10x10
Pellet		[mm]	-
Solid wire	⌀	[mm]	-

*other dimensions on request