SN100C (SnCu0.7Ni)

 Date
 2021.05.10

 Language
 English

 SDS
 950002



SUMMARY

Alloy SN100C is a tin-copper eutectic stabilized by nickel with additional doping of germanium to permanently reduce the oxidation of the solder.

ALLOY	SN100C (SnCu0.7Ni)	
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	8	
Process: N2 partial	8	
Process: N2 vull tunnel	9	
Reduces dross	8	
Reduces bridging	8	
Improves PTH filling	8	
Shiny joint appearance	9	

Legend		
Especially made for this purpose	9 - 10	
Generally qualified for this purpose		
Generally usable, but not the best choice		
Generally not usable for this purpose		
Wrong choice		

Check material compatibility with every process change.

Read AN before use.

Read MSDS before use.

PROPERTIES			
Manufacturing standard	WBZ.	WBZ.: Triple X	
Alloy Code	SN	SN100C	
Alloy composition	SnC	SnCu0.7Ni	
ANSI/J-STD-006C: 2013	con	compliant	
DIN EN ISO 9453:2021-01	Allo	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	[AI]	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	[ln]	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	0	[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.

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