

## Sn099-1207

*for Automatic Tin Feeding Soldering Process*

Sn099-1207 solder wire is mainly made of high-purity tin, refined by using the most advanced professional equipment of lead-free solder and excellent technology through a special process. Flux is a synthesis of antioxidants and surfactants at high temperatures. It can effectively reduce the production of tin slag and reduce the lack of molten tin due to the tin slag. It is specialized for use with intelligent automatic solder machines in the lead-free process. It is an environmentally friendly lead-free solder wire with excellent welding performance.

### FEATURES

- The packaged solder wire is flat, smooth, uniform.
- Comply with RoHS requirement.
- Low rate of tin slag, high anti-oxidation.

### APPLICATION

Sn099-1207 welding wire is specially matched with the automatic tin adding machine.

### TYPICAL PROPERTIES

Items	Technical Parameters	Standards
Part Number	Sn099-1207	/
Metal Alloy	Sn99.7	/
Appearance	Silvery white, smooth and clean surface, no crack.	Visual Inspection
Diameter (mm)	3.00±0.20	GB/T 20422-2006 5.5
Flux (wt %)	0.3±0.1	IPC-TM-650 2.3.34.1
Melting Point (°C)	232	/
Guarantee period	2 Year	From the date of production
Packaging	15kg /Reel	/

### ALLOY COMPOSITION

No.	Items	CAS. No.	Content(%)
Key Metal Alloy			
1	Tin (Sn)	7440-31-5	99.7±0.3
Impurity Limit			
2	Silver (Ag)	7440-22-4	≤0.10
3	Lead (Pb)	7439-92-1	≤0.10
4	Iron (Fe)	7439-89-6	≤0.02
5	Bismuth (Bi)	7440-69-9	≤0.10
6	Stibium (Sb)	7440-36-0	≤0.10
7	Indium (In)	7440-74-6	≤0.10
8	Zinc (Zn)	7440-66-6	≤0.001
9	Aurum (Au)	7440-57-5	≤0.05
10	Nickel (Ni)	7440-02-0	≤0.01
11	Aluminum (Al)	7429-90-5	≤0.001
12	Cadmium (Cd)	7440-43-9	≤0.002
13	Arsenic (As)	7440-38-2	≤0.03
14	Copper (Cu)	7440-50-8	≤0.05

## DIRECTION OF USES

- The recommended set temperature of ferrochrome head is  $265\pm 5^{\circ}\text{C}$ , in order to reach the best to molten state temperature of welding wire.
- When adding tin, pay attention to set up the tin machine and tin temperature of the furnace and the liquid level in the furnace to avoid the overflow of tin.
- Regularly to cleaning tin slag in the furnace, tin slag is likely to add interferences with the temperature controller and fluid control probe of tin machine. Wire contains special antioxidant and surfactant; a long time under the environment of high temperature may form carbides in the surface of tin stove. The carbide is helpful to protect the tin surface from oxidation.
- Make welding atmosphere in hypoxic condition, inhibit the oxidation of parent metal and wire will improve welding quality. Recommended in conditions allow the use of nitrogen gas welding work atmosphere.
- Personal protective equipment must meet the working range safety norms; wear protective clothing and mask, so as not to scald by splashing liquated solder.
- Please refer to product MSDS for more safety information.

The data contained in this bulletin is provided only as a guide for evaluation/consideration. These material characteristics are typical properties that are based on a limited number of samples tested in the laboratory. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any product or method. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide.