

## SAC305-1212W

### Lead-free solder wire

SAC305-1212W lead-free solder wire is made of high-quality and high-purity tin ingots as the main raw material, supplemented by high-quality and high-purity copper and silver. It is refined through special processes using the most advanced lead-free solder professional equipment and excellent technology. Specially used with intelligent automatic tin adding machines in lead-free processes, it is a lead-free alloy solder wire with superior welding performance and environmental protection.

### FEATURE

- The coiled wire is neat, flat, smooth, evenly wound, and will not get tangled during routing.
- It is a green and environmentally friendly product that complies with RoHS and other environmental protection requirements.

### APPLICATION

SAC305-1212W lead-free alloy tin wire is specially used with automatic tin adding machines.

### TYPICAL PROPERTIES

Items	Technical indicators	Standards
Part number	SAC305-1212W	/
Alloy ingredients	Sn96.5/Ag3.0/Cu0.5	/
Exterior	Silver white, smooth and clean surface, no cracks	Visual Inspection
Diameter(mm)	3.00±0.10	GB/T 20422-2006 5.5
Melting point (°C)	217	/
Shelf Life	2 year	From the date of production
Packaging	15kg/roll	/

### ALLOY COMPOSITION

No.	Items	CAS. No.	Content(%)
Main alloy composition and content			
1	Tin (Sn)	7440-31-5	Surplus Quantity
2	Copper (Cu)	7440-50-8	0.5±0.1
3	Silver (Ag)	7440-22-4	3.0±0.2

### Impurity composition and content

4	Lead (Pb)	7439-92-1	≤0.10
5	Iron (Fe)	7439-89-6	≤0.02
6	Steel (Bi)	7440-69-9	≤0.10
7	Antimony (Sb)	7440-36-0	≤0.10
8	Indium (In)	7440-74-6	≤0.10
9	Zinc (Zn)	7440-66-6	≤0.001
10	Aurum (Au)	7440-57-5	≤0.05
11	Nickel (Ni)	7440-02-0	≤0.01
12	Aluminum (Al)	7429-90-5	≤0.001
13	Cadmium (Cd)	7440-43-9	≤0.002
14	Arsenic (As)	7440-38-2	≤0.03

### DIRECTION OF USE

- Based on the actual welding tin amount requirement, the tin adding machine selects an appropriate speed to avoid the phenomenon of non-melting tin.
- It is recommended that the temperature in the furnace be set at 270±5°C (actual measurement), so that the temperature reaches the optimal melting state of the tin wire and reduces the occurrence of tin splashing.
- When adding tin, pay attention to setting the tin adding temperature of the tin adding machine and the liquid level in the furnace to avoid tin overflow.
- Clean the tin slag in the furnace regularly. The tin slag may interfere with the temperature control and liquid control probe of the tin adding machine.
- Keeping the welding atmosphere in a low-oxygen state has the effect of inhibiting the oxidation of the base metal and tin wire, thereby improving the quality of tin welding. It is recommended to use nitrogen operating atmosphere welding when conditions permit.
- Personal protective equipment must meet the safety regulations in the work area. Wear protective clothing and protective shields to avoid being burned by splashing solution-state solder. For more safety protection information, please see the MSDS of this product.

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.