

## SnCu07-1216HF

### Halogen-free Lead-free Solder Wire

SnCu07-1216HF halogen-free 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. It adopts the latest it is refined with the latest professional lead-free solder equipment and excellent technology through special processes. This lead-free tin wire flux is made of high-quality modified resin, Formulated with organic activators and various additives, it is an environmentally friendly lead-free alloy solder wire with superior welding performance in the lead-free process.

### FEATURES

- The coiled wire is neat, smooth, smooth, evenly wound, and will not get tangled during routing.
- The flux within the line is evenly distributed, has good continuity, and has no core breakage.
- It has excellent electrical conductivity and thermal conductivity, fast tin application and strong wetting power.
- There is no irritating smell, less smoke and little splash during welding.
- There is less residue after welding, it spreads evenly and dries quickly.
- After welding, the surface insulation resistance is high and the electrical performance is stable and reliable.
- It is a green and environmentally friendly product that complies with RoHS and other environmental protection requirements.

### APPLICATION

- SnCu07-1216HF halogen-free lead-free solder wire is widely used in communication equipment, instrumentation equipment, audio and video multimedia equipment, automotive industry
- Mounting and repair operations of industrial equipment, household electronic and electrical equipment and components, and manual welding and automatic welding of other high-reliability electronic products
- Mechanical welding.

### PHYSICAL PROPERTIES

Items	Technical parameters	Standards
Product number	SnCu07-1216HF	/
alloy composition	Sn99.3Cu0.7	/
Exterior	Silver white, smooth and clean surface, no cracks	Visual
Diameter (mm)	0.15;0.2;0.3;0.4;0.5;0.6;0.8;1.0;1.2;1.5;2.0;3.0	Corporate standards
shelf life	2 years	From the date of production

Packing	1kg/roll, 0.5kg/roll, 10kg/box	/
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### TECHNICAL SPECIFICATIONS

Items	skills requirement	Standards
Density (g/cm <sup>3</sup> )	7.31	/
Flux content (wt%)	2.0±0.5 2.5±0.5 3.0±0.5	IPC-TM-650 2.3.31
Melting point(°C)	227	/
Copper mirror corrosiveness	No penetrating corrosion	IPC-TM-650 2.3.32
RoHS	qualified	RoHS Directive
Flux distribution network continuity, discontinuity	Uniform and continuous, no gaps	/
Copper plate corrosiveness	No obvious corrosion	IPC-TM-650 2.6.15
Halogen content	LO	IPC-TM-650 2.3.33
Expansion rate (%)	≥75%	JIS-Z-3197 8.3.1.1
Residue dryness	The surface of the flux residue should be free of stickiness sex, chalky on the surface should be easily removed	IPC-TM-650 2.4.47

## 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	0.7±0.1
Impurity composition and content			
3	Silver (Ag)	7440-22-4	≤0.10
4	Lead (Pb)	7439-92-1	≤0.10
5	Iron (Fe)	7439-89-6	≤0.02
6	Bismuth (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	Gold (Au)	7440-57-5	≤0.05
11	Aluminum (Al)	7429-90-5	≤0.001
12	Cadmium (Cd)	7440-43-9	≤0.002
13	Arsenic (As)	7440-38-2	≤0.03

## DIRECTION OF USE

- Based on actual welding needs, select a ferrochrome head suitable for large and small apertures.
- It is recommended that the temperature of the soldering iron tip be set at 380±20°C, so that the temperature reaches the optimal melting state of the tin wire and reduces the occurrence of tin splashing.
- During the welding process, since the surface attachment of the soldering iron tip contains a large amount of tin oxide and flux residue, it is easy to cause undesirable effects on the welding.
- It is recommended to clean the soldering iron tip after using it for a period of time.
- By keeping the welding atmosphere in a low-oxygen state, it can inhibit the oxidation of the base metal and tin wire, thereby improving the quality of tin welding. It is recommended that
- Use nitrogen working atmosphere for welding when conditions permit.
- Personal protective equipment must meet work area safety regulations, and protective clothing and shields must be worn to protect against welding in the form of splashing solutions.
- Materials may cause burns. For more safety protection information, 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.