# GLUDITEC Glue & Dispensing Technology

## **Technical Data Sheet**

# SAC305-1104H

## High temperature Lead-free Solder Bar

SAC305-1104H High temperature lead-free solder bar is mainly made of high-purity tin, supplemented with high-purity silver & copper, refined by using the most advanced professional equipment of lead-free solder and excellent technology through special process. It is an environmentally friendly lead - free solder bar with excellent welding performance in lead-free process.

#### **FEATURES**

- · Less metal impurity and low oxide content and high purity.
- After molten tin liquid surface smooth, level off, low viscosity, excellent liquidity.
- Unique high oxidation performance of tin slag quantity is few.
- Good wettability, surface tension is small, easy to tin, bright spot, full, welding quality is stable and reliable.
- Green environmental protection products, in line with RoHS environmental protection requirements, etc.

#### **APPLICATION**

SAC305-1104H High temperature lead-free solder bar is widely applied to communications equipment, instrumentation equipment, audio and video multimedia equipment, automotive industry, household electrical and electronic equipment and other electronic products of wave soldering reliability, precision welding and special welding technology, such as manual welding and automatic welding, such as spraying, electroplating.

## **TYPICAL PROPERTIES**

Items	Technical Parameters	Standards	
Part Number	SAC305-1104H	/	
Metal Alloy	Sn96.5Ag3.0Cu0.5	/	
Appearance	Silvery White, Trapezoidal cross- section of strip casting alloys	Visual Inspection	
Melting Point (°C)	217	GB/T 20422- 2006	
Density (g/cm³)	7.4	GB/T 20422- 2006	
RoHS Compliance	PASS	RoHS Standard	
Shelf Life	Shelf Life 2 years		
Packaging	20kg/box & 1kg/Bar	/	

#### **ALLOY COMPOSITION**

No.	Items		CAS. No		ntent (%)		
Key Metal Alloy							
1	Tin (Sn)		7440-31-5		Surplus Quantity		
2	Silver (Ag) 7		440-22-4 3.0		D±0.2		
3	Copper (Cu)		440-50-8 0.5		5±0.1		
Impurity Limit							
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	Stibium (Sb)		7440-36-0		≤0.10		
8	Indium (In)		7440-74-6		≤0.10		
9	Zincum (Zn)		7440-66-6		≤0.001		
10	Aurum (Au)		7440-57-5		≤0.05		
11	Nickel (Ni)		7440-02-0		≤0.01		
12	Aluminum (AI)		7429-90-5		≤0.001		
13	Cadmium (Cd)		7440-43-9		≤0.002		
14	Arsenic (As)		7440-38-2		≤0.03		

#### **APPLICATION GUIDE**

- After using for a period of time, the composition of alloys will be changed, and that will lead to decline the welding performance and mechanical properties of solder, so the composition of solder alloys should be adjusted regularly by using pure tin. (Advice: every 10-15 day per time)
- Soldering temperature is about 350--450 °C. (Furnace inside practical testing temperature)

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.

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info@aluditec.com