

SPECIFICATIONS OF SOLDER WIRE

63/37

63/37 solder wire specification

	FEATURE VALUE	SPECS/standard
01	FLUX TYPE	F5
02	WIRE DIAMETER (mm)	0.25~1.6
	<input type="checkbox"/> 0.25 <input type="checkbox"/> 0.4 <input type="checkbox"/> 0.6 <input type="checkbox"/> 0.8 <input type="checkbox"/> 1.6 <input type="checkbox"/> other_____	
03	CONTENT OF Sn (wt%)	BALANCE
04	CONTENT OF Pb (wt%)	37±0.5
05	CONTENT OF FLUX (wt%)	2.4±0.3
06	DRYNESS	pass
07	CONTENT OF HALOGEN (wt%)	Cl+Br < 0.15
08	WATER SOLUTION RESISTANT(Ω cm)	Over 50,000
09	INSULATION RESISTANT (Ω)	Over 10^8
10	EXPANSION RATE %	>80
11	CORROSION ON COPPER PLATE	pass
12	SOLID TEMP °C	183°C

Note: This specification refers to IPC J-STD-004B or JISZ3284. The Company reserves the right to the final interpretation of the applicable provisions of this Specification; The performance indicators listed in this table are reference values and are not used as legal guarantee basis! The actual value shall be subject to the QA report of each delivery! The flux and viscosity meet the customer's requirements, and no notice will be given when changing.

Solder quality specification (performed by: JIS Z 3282-1999A)

Categories	Sn	Pb	OTHER METAL STANDARD(wt%)							
			Sb	Cu	Bi	Zn	Fe	Al	As	Cd
A	BALANCE	37.5±0.5	0.12 BELOW	0.05 BELOW	0.10 BELOW	0.002 BELOW	0.02 BELOW	0.002 BELOW	0.03 BELOW	0.002 BELOW

**Note: This material just for reference, it will not act as legal guarantee approval!
The actual vale is subject to QA report of each lot shipment.**

MATERIAL SAFETY DATA SHEET

Section one Chemical product and corporate logo

Product name	Solder Wire
Model	63/37
Manufacturer name	YIWU JINNING TRADE COMPANY
Manufacturer address	ROOM 301, UNIT 2, BUILDING 110, JIANGNAN THIRD DISTRICT, JIANGDONG STREET, YIWU CITY, JINHUA CITY, ZHEJIANG, CHINA
Emergency contact №	+19142943650

Section two Main components

Main content	name	Chemical formula	Contents Rate%	CAS registry number	Relatively Molecular mass
Alloy composition 97.6%	Tin	Sn	63	7440-31-5	118.69
	Lead	Pb	37	7439-92-1	207.2
Promoting agent (rosin) 2.4%	Rosin	Flux	95	65997-05-9	---
	promoting agent	---	5	---	---

Product appearance and character: off-white strip solid.

main application: welding

Section three Hazard Identification information

The most important effect of hazards	health hazard: Excite to eyes ,skin, mucous membrane and respiratory, absorb the fog of tin in long-playing can cause pneumoconiosis (or stannosis) .
	environmental influence: Harmful to the environment, may cause pollution the water ,soil, and atmosphere
	Physical and chemical hazards: Born or inhale decomposition product May cause nerve damage
	Special hazard: None

Hazard classification items: None

Section four First aid treatment

First aid for different exposure way:

- skin contact: take off the infected clothes and use flow water to wash.
- Eye contact: lift the eyelid, use flow water or physiological saline wash, hospitalize.
- Inhalation: Leave the place to the flesh air area, keep respiratory system unobstructed. If breath difficulty, supply the oxygen therapy and see the doctor.
- Ingestion: drink enough warm water press to vomiting , wash the stomach and see the doctor.

Section five Blastability and Fire-fighting measures

Hazardous characteristics: The powder will burning when it get close to elevated temperature or fire.

Harmful combustion products: tin oxide

extinguishing agent: Dry power fire extinguisher, sandy clay and carbon dioxide extinguisher.

Fire extinguishing method: fire-fighter must wear the anti-poisonous mask, wear the uniform and put on a fire.

Section six Accidental release measures

Notes: Avoid inhale solder tin fog or powder.

Environmental notes: Don't expand drain region.

Cleaning Method: Advise the operator wear dustproof mask, use the clean scoop to collect the dry ,clean container with cover. If leak out in a large quantity, please collect back.

Section seven Safety handling and storage

Handling notes: 1.Read all signs of container.

2.No allow eating, drinking, smoking and titivated in the working place.

3 Light install and light remove by conveying, avoid damage the package. Prepare the variety and the quantity of fire-fighting equipment and leak out disposal. Empty containers may still have harmful material in.

Storage notes: keep it in a cool shadowy storage, keep away from the fire, heat. The oxidant and acid should be separate for storage, do not mix them. Fit out the variety and fire-fighting equipment. The storage must have the suitable material to collect the leak out substance.

Storage life: 1 year (under normal temperature)

Section eight Preventive measure

Testing method: flame atomic absorption spectrometry

Engineering control: no need for special defend, but avoid the damage of fog and dust.

Respiratory system protection: when the chroma of dust in the air super scale, must wear the filtrate dustproof respirator. If in emergency situation or remove, must wear the air respiratory.

Eye protection: put on defend glasses.

Body protection: wear anti-poisonous uniform.

Hand protection: wear latex gloves.

Workshop hygiene standards: Smoking, eating, and drinking are prohibited at the work site. After work, take a shower and change clothes. Conduct pre - employment and regular physical examinations. Maintain good hygiene habits.

Section nine Physical and chemical properties

Physical state: solid	modality: solid
color: silver white	Odour: none
Relative density (water=1): 8.4	Solubility in water: Do not dissolve in water
Melting point: 183°C	Boiling point and range: /
self-ignite point: /	Flash point:/

Section ten Stability and reactivity

stability: stable

Avoid contacting condition: strictly forbidden direct sunlight or high heating, avoid contacting water steam or acid.

Forbidden matching : strong oxidizer, trong acid,water

Convergent harm: ——

Decomposition product: ——

Section eleven Toxicological information

Acute toxicity: LD50: no data LC50: no data
Sub acute and slow toxicity: ——
Cause sensibility: ——
Irritation: ——
Mutagenicity: ——
Teratogenicity: ——
Carcinogenicity: ——

Section twelve Ecological information

Migration: ——	Durability / Degradability: ——
Biological accumulation: ——	Ecotoxicity: ——
Other deleterious effect: when the chroma of water is 2mg/L, have metal smelling.	

Section thirteen Waste disposal method

Waste disposal method: Please refer to the Country or region rules ,recycle to reuse if possible.
Waste disposal issues: ——

Section fourteen Transport information

Risk classification and number: ——	
UN code: ——	Package logo: ——
Package classification: Z01	Package method: ——
Safety tag: ——	
Transportation notes: The package must integrity and install or remove should be stable. Make sure the container no damage, no leak out, no purer .Avoid mixing from antioxidant acid, and edible chemical product. No allow direct sunlight or drench etc. The car must be completely clean after transporting.	

Section fifteen Statutable information

Regulatory Information: The Regulations on the Safety Management of Hazardous Chemicals (December 1, 2011, State Council Order No. 591) have made corresponding provisions for the safe use, production, storage, transportation, loading and unloading of hazardous chemicals in workplaces; GBZ 2.1-2019 Occupational Exposure Limits for Hazardous Factors in the Workplace Part 1: Chemical Hazardous Factors specifies occupational exposure limits for chemical factors such as tin dioxide, lead and its inorganic compounds, lead dust (smoke), copper dust (smoke), etc. in the workshop air; Solid Waste Pollution Prevention and Control Law (September 1, 2020).

Section sixteen Other information

References: Chinese database of hazardous chemicals, Ministry of Ecology and Environment, National Health Commission	
Watchmaking unit	Name: YIWU JINNING TRADE COMPANY
	Address: ROOM 301, UNIT 2, BUILDING 110, JIANGNAN THIRD DISTRICT, JIANGDONG STREET, YIWU CITY, JINHUA CITY, ZHEJIANG, CHINA
	TEL: +19142943650
Lister	Title: Engineer
Date : 2025.12.09	
Notes : The symbol “——” in above data stands for no relative currently, the symbol “/” stands for this column is not suitable for this material.	

Operating guide for solder wires

One Hand welding step

1 Heats up the weldment: the head of iron puts in is welded the metal the junction

Contacts the position: the head of iron should simultaneously contact needs the interconnection two weldments, the head of iron generally inclines 45°, should avoid only and a weldment contact or the contacted area too small phenomenon.

Contact pressure: the head of iron contacts with the weldment when should serve with the suitable pressure, take does not create the damage to the weldment surface as the principle.

2 Melt tin moist: Delivers the tin silk and the evacuation tin silk

Delivers the soldering tin silk opportunity: In principle is the weldment temperature achieved when soldering tin solution temperature delivers the soldering tin silk immediately;

Supplies position: The soldering tin silk should contact in the head of iron opposite side. Because fuses the soldering tin has to the temperature direction mobile characteristic, adds the tin in the opposite side, it can very quickly flow to the head of iron the contact spot, may guarantee the spot all around evenly covers entirely the soldering tin. If supplies soldering tin silk direct contact the head of iron, soldering tin silk very quick melting cover in welding place, if the work piece other spots had not achieved the welding temperature, is easy to form the empty spot.

3 Stops heating up: Evacuation iron:

Falls off the opportunity: Soldering tin already full moist welding spot, when the solder not yet completely volatilizes, forms the luminous spot, immediately is separated from (each spot welding time 2~3S), if the spot surface does not have the gloss but roughly, the showing evacuation time was late.

Two Cautions of Hand welding

Generally, in the manual iron soldering, the temperature of iron head should be the temperature of the melting point of solders plus 150°C. The temperature of the lead solder wires can generally be set as 330°C. The right sequences of manual iron soldering should be the temperature of the first contact of the pad. The heat will be transmitted to the pad so that there will be arise in the temperature of the pad. Then place the solder wires on the pad. Now, the temperature of the pad should be high enough to melt the solders and form bonding. Therefore, the melted solders have the properties of flowing towards the direction of higher temperatures to contact the pad first of all. It will soon flow to the part of the iron heads, the solder wires will be soon melted and cover at the welds. If other parts of work pieces fail to live up to the welding temperature, it is easy to form virtual soldering point. Special attention should be paid that the solder wires should be directly contact the iron heads. Since the temperature of iron heads is very high, this will easily cause spatters or may burn workers when the case is severe.