

## 1、CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEMICAL PRODUCT NAME : Lead Free Solder Wire  
PRODUCT IDENTIFIER : PF529-R、PF565-R、PF604-R、PF606-R、PF608-R、PF610-R、PF614-R、PF619-R、PF620-R、PF627-R、PF629-R、PF632-R、PF634-R、PF636-R、PF637-R、PF638-R、PF639-R、PF640-R、PF643-R、PF645-R、PF647-R、PF665-R、PF801-R、PF606-F3、PF629-F3、PF529-F4、PF604-F4、PF606-F4、PF610-F4、PF620-F4、PF629-F4、PF643-F4、PF665-F4、PF674-F4、PF678-F4、PF679-F4、PF708-F4、PF604-F5、PF606-F5、PF610-F5、PF629-F5、PF643-F5、PF604-F6、PF606-F6、PF629-F6、PF636-F6、PF565-F7、PF604-F7、PF606-F7、PF610-F7、PF620-F7、PF629-F7、PF632-F7、PF643-F7、PF679-F7、PF627-F8、PF628-F8、PF606-F10、PF629-F10、PF604-F11、PF606-F11、PF610-F11、PF611-F11、PF629-F11、PF643-F11、PF651-F11、PF679-F11、PF604-JF2、PF604-JF3、PF604-F13、PF606-F13、PF610-F13、PF620-F13、PF629-F13、PF643-F13、PF674-F13、PF678-F13、PF678-F100、PF679-F13、PF708-F13

**MANUFACTURER:**  
**HEADADQUARTER:**  
**SHENMAO TECHNOLOGY INC.**  
**Address:** No.12-1 Gongye 2<sup>nd</sup> Rd., Guayin industrial area, Taoyuan City 328, Taiwan  
**Tel:** (886)3-416-0177 **Fax:** (886)3-416-0133  
**Website:** <http://www.shenmao.com>

## 2、HAZARDS IDENTIFICATION

hazard classification:

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

### Hazard pictograms



GHS07

**Signal word** Warning

### Hazard-determining components of labelling:

Rosin

Tin

Silver

### Hazard statements

H317 May cause an allergic skin reaction.

### Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P402 Store in a dry place.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### 2.3 Other hazards


#### Results of PBT and vPvB assessment

**PBT:** Not applicable.

**vPvB:** Not applicable.

Other hazard:

### 3、COMPOSITION, INFORMATION OR INGREDIENT

Components-Chemical Name	wt. %	
Tin (Sn)	90.0~99.0	CAS:7440-31-5 EINECS: 231-141-8
Silver(Ag)	0.0~5.0	CAS: 7440-22-4 EINECS: 231-131-3
Copper (Cu)	0.0~4.0	CAS: 7440-50-8 EINECS: 231-159-6
Rosin  Skin Sens. 1, H317	1.0~5.0	8050-09-7

### 4、FIRST AID MEASURES

First aid method in the different exposed way:

#### INHALATION :

Remove to fresh air. If not breathing, give artificial respiration or oxygen by trained personnel.

#### SKIN CONTACT :

Remove contaminated clothing. Wash affected area with soap and water. Wash clothing before reuse. If irritation persists, obtain medical attention.

#### EYE CONTACT :

Gently rinse the affected eyes with clean water for at least 15 minutes.

Arrange for transport to the nearest medical facility for examination and treatment by a physician as soon as possible.

#### INGESTION :

Arrange for transport to the nearest medical facility for examination and treatment by a physician as soon as possible.

The most important symptoms and hazardous effect: Irritation feeling

The protection to first-aid personnel: Should wear the protection equipment of level C to give first aid in the safe area.

Notes to physicians: —

### 5、FIRE FIGHTING MEASURES

#### EXTINGUISH MEDIA :

Use alcohol resistant foam, carbon dioxide or dry chemical extinguishing agents.

**FIRE-FIGHTING INSTRUCTIONS :** Not applicable

Specific fire-fighting methods : Not applicable

Special equipment for the protection of firefighters: Not applicable

### 6、ACCIDENTAL RELEASE MEASURES

Personal precautions:

The man who without wear protect equipping or clothes forbidden enter in the let out area before clean.

Environmental precautions: Ventilate to the let out area.

Methods for cleaning up:

1. Recycle the material or bury with the qualified method in most convenient and safe way.
2. The liquid can be absorbed with the vermiculite, sand, soil or similar material.

## 7、HANDLING AND STORAGE

Handling: During work avoids producing the dust.

Storage:

Dry and non-corrosive with no sunlight

## 8、EXPOSURE CONTROLS AND PERSONAL PROTECTION

### ENGINEERING MEASURES :

1. Partial air exhaust device.
2. Whole air exhaust device.

### EXPOSURE GUIDELINES :

TWA: 2mg/m<sup>3</sup> (Tin)

### PROTECTIVE EQUIPMENT :

Respiratory protection: 0~10 mg/m<sup>3</sup>: Dustproof breathing mask.

20 mg/m<sup>3</sup>: 1. Dustproof breathing mask. 2. Air supply type breathing mask.

50 mg/m<sup>3</sup>: 1. Dustproof and air filter breathing mask.

2. Continuous air supply type breathing mask.

100 mg/m<sup>3</sup>: 1. Contain high performance filter and air filter breathing mask.

2. Continuous air supply type breathing mask.

Unknown consistency: Continuous air supply type breathing mask.

Escape: 1. Contain high performance filter and air filter breathing mask.

2. Continuous air supply type breathing mask.

Hand protection: Rubber or plastic glove.

Eye protection: 1. The safe goggles which can defend splash. 2. Face guard in an all-round way. 3. Don't wear the contact lenses.

Skin and body protection: Apron, long sleeves clothes.

Hygiene measures: Forbid smoking or diet in the workplace.

## 9、PHYSICAL AND CHEMICAL PROPERTIES

Appearance(physical state, color) : Silver gray solid	Odor: —
Odor threshold: —	Melting point: 217-270°C
pH: —	BOILING POINT: —
Flammability (solid, gas): —	Flash Point: —
Decompose temperature: —	Test Method ( Open cup or Close cup ) : —
Auto-ignition temperature: —	Explosion Limit: —
Vapor Pressure: —	Vapor Density: —
Density: 7.3-7.4 g/cm <sup>3</sup>	Solubility: Almost Insoluble
Partition coefficient(n-octanol/water,log Kow): —	Evaporation rate: —
Specific gravity (25°C): —	Acid value (mgKOH / g): -
Solid content (%): -	

## 10、STABILITY AND REACTIVITY

Stability: Stable
Possible hazardous reactions under specific conditions: not applicable
<b>Materials to be avoided:</b> Strong acids, strong oxidizers.
<b>Dangerous products of decomposition:</b> not applicable

## 11、TOXICOLOGICAL INFORMATION

Routes of exposure: nose, skin.
Symptoms: May cause the irritation of nose, skin.
Acute toxicity: May cause the irritation of nose, skin.
Chronic toxicity or long term toxicity: —

## 12、ECOLOGICAL INFORMATION

Ecotoxicity: —
Persistent and biodegradable: —
Bio-accumulative potential: —
Mobility in soil: —
Other adverse effects: —

## 13、DISPOSAL CONSIDERATIONS

Methods of waste disposal : Utilizing recoverably or according to the refuse disposal ordinance disposal
---

## 14、TRANSPORT INFORMATION

UN No.: Not applicable
UN Proper shipping name: Not applicable
Transportation hazard classification : Not-restricted by IATA
Packing group: Not applicable
Marine pollutant (Yes/No): Not applicable
Specific transport measures and precautionary conditions: Dry and non-corrosive with no sunlight

## 15、REGULATORY INFORMATION

Applicable regulations: 1. Occupational Safety and Health Act. 2. Laborer operating environment permits the thickness standard 3. Industrial waste storage cleaning dispose method and facility standard 4. Hazardous chemicals labeled general rule 5. Hazardous chemicals safety management regulations 6. New chemical substances environmental management measures
<b>Labelling according to Regulation (EC) No 1272/2008</b> The product is classified and labelled according to the CLP regulation. <b>Hazard pictograms</b>



GHS07

**Signal word** Warning

**Hazard-determining components of labelling:**

Rosin  
 Tin  
 Silver

**Hazard statements**

H372. Causes damage to organs  
 H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P402 Store in a dry place.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Directive 2012/18/EU**

**Named dangerous substances - ANNEX I** None of the ingredients is listed.

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**16、OTHER INFORMATION**

Reference	Occupational Safety and Health Administration , Ministry Of Labor, GHS inquiry system
PREPARED BY	SHENMAO TECHNOLOGY INC.
	No.12-1 Gongye 2nd Rd., Guanyin Industrial Area, Taoyuan City 328, Taiwan
	TEL : +886-3-416-0177
ISSUED	Alan Huang
REVISED DATE:	2018/6/25
Note	Indication "—" represents present not correlation data

The information herein is given in good faith, but no warranty, express or implied, is made.