# **SAFETY DATA SHEET**

ALLOY Sn63-Pb37 Glowcore



Safety Data Sheet according to GB/T 16483-2008 and GB/T 17519-2013

## Section 1. Chemical product and company identification

GHS product identifier : ALLOY Sn63-Pb37 Glowcore

GHS reference number : GHS104

Product type : Solid. [Cored Wire]

**Identified uses** 

Not applicable.

Supplier's details : International:

AIM

9100 Henri Bourassa East

Montreal, QC H1E 2S4 (514) 494-2000

In China:

AIM Solder (CHANGXING) Company Limited

No.1208-D Chenwang Rd., Taihu St. Changxing County, Huzhou, Zhejiang

0572-6683800

AIM Solder (SHANGHAI) Company., Limited

Room 302-c50, No. 3, Lane 1509, Xinzhen Road, Minhang District, Shanghai

0572-6683800

In Malaysia:

AIM Solder (Malaysia)

No. 2A, Jalan Industri Seri Juru,

Taman Industri Seri Juru, 14000 Bukit Mertajam,

Pulau Pinang, Malaysia

+6012 800 1936

Emergency telephone number (with hours of operation) : INFOTRAC

North America: (800) 535-5053 International: (352) 323-3500

## Section 2. Hazards identification

Classification of the substance or mixture according to GB 13690-2009 and GB 30000-2013

Classification of the : TOXIC TO REPRODUCTION - Category 1B

substance or mixture TOXIC TO REPRODUCTION - Effects on or via lactation

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

**GHS label elements** 

Hazard pictograms :



Signal word : Danger

**Hazard statements** : May damage fertility or the unborn child.

May cause harm to breast-fed children.

May cause damage to organs through prolonged or repeated exposure.

# Section 2. Hazards identification

## **Precautionary statements**

**Prevention** 

: Obtain special instructions before use. Wear protective gloves, protective clothing and eye or face protection. Do not breathe dust. Avoid contact during pregnancy or while nursing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Do not handle until all safety precautions have been read and understood.

Response : IF exposed or concerned: Get medical advice or attention.

: Store locked up. **Storage** 

**Disposal** : Dispose of contents and container in accordance with all local, regional, national

and international regulations.

Other hazards which do not : None known.

result in classification

## Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification

: Not applicable

## **CAS** number/other identifiers

**CAS** number : Not applicable. **EC** number : Mixture.

| Ingredient name     | %        | CAS number |
|---------------------|----------|------------|
| tin                 | 60 - 70  | 7440-31-5  |
| Lead                | 30 - 40  | 7439-92-1  |
| Rosin, hydrogenated | 0.1 - 10 | 65997-06-0 |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

## **Description of necessary first aid measures**

**Eye contact** 

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell.

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open

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## Section 4. First aid measures

airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## Most important symptoms/effects, acute and delayed

## Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

## Over-exposure signs/symptoms

Eye contact : No specific data.

**Inhalation** : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

**Skin contact**: Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

**Ingestion**: Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

## Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments

: No specific treatment.

**Protection of first-aiders** 

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

### See toxicological information (Section 11)

## Section 5. Fire-fighting measures

## **Extinguishing media**

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

: None known.

Specific hazards arising from the chemical

: No specific fire or explosion hazard.

Hazardous thermal decomposition products

 Decomposition products may include the following materials: metal oxide/oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** 

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

## Methods and materials for containment and cleaning up

**Small spill** 

: Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# Section 7. Handling and storage

### Precautions for safe handling

**Protective measures** 

: Put on appropriate personal protective equipment (see Section 8). Avoid exposure obtain special instructions before use. Avoid contact during pregnancy or while nursing. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general** occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

including any incompatibilities

Conditions for safe storage, : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

**Control parameters** 

**Occupational exposure limits** 

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## Section 8. Exposure controls/personal protection

| Ingredient name | Exposure limits  |
|-----------------|--|
| tin             | ACGIH TLV (United States, 3/2020). TWA: 2 mg/m³, (as Sn) 8 hours. Form: Inhalable fraction                               |
|                 | GBZ 2.1 (China, 8/2019). PC-TWA: 0.05 mg/m³, (as Pb) 8 hours. Form: dust PC-TWA: 0.03 mg/m³, (as Pb) 8 hours. Form: fume |

# Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

# **Environmental exposure** controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## **Individual protection measures**

**Hygiene measures** 

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

### **Eye/face protection**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

## Skin protection

**Hand protection** 

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

## **Body protection**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

### Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

## **Respiratory protection**

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

## <u>Appearance</u>

Physical state : Solid. [Cored Wire]

Color : Colorless.

Odor : Not applicable

Odor threshold : Not available.

pH : Not available.

ALLOY Sn63-Pb37 Glowcore

## Section 9. Physical and chemical properties

**Melting point** : 183 to 302°C (361.4 to 575.6°F)

Boiling point : Not available.

Flash point : [Product does not sustain combustion.]

Evaporation rate : Not available.
Flammability (solid, gas) : Not available.
Lower and upper explosive : Not applicable.

(flammable) limits

Vapor pressure : Not available.
Vapor density : Not applicable.
Relative density : 7.6 to 11.2

**Solubility** : Insoluble in the following materials: cold water, hot water, METHANOL, diethyl ether,

n-octanol and acetone.

Partition coefficient: n-

octanol/water

: Not applicable.

Auto-ignition temperature : Not applicable.

Decomposition temperature : Not available.

Viscosity : Not applicable.

## Section 10. Stability and reactivity

**Reactivity**: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

**Hazardous decomposition** 

products

: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

## **Section 11. Toxicological information**

## Information on toxicological effects

## **Acute toxicity**

| Product/ingredient name | Result    | Species | Dose         | Exposure |
|-------------------------|-----------|---------|--------------|----------|
| Rosin, hydrogenated     | LD50 Oral | Rat     | >32000 mg/kg | -        |

## **Irritation/Corrosion**

No known significant effects or critical hazards.

## **Sensitization**

No known significant effects or critical hazards.

#### **Mutagenicity**

No known significant effects or critical hazards.

## **Carcinogenicity**

No known significant effects or critical hazards.

# Section 11. Toxicological information

**Conclusion/Summary**: Human: LEAD crosses the placental barrier.

CHRONIC OVEREXPOSURE EFFECTS; Increase of LEAD LEVEL in blood,

muscle soreness, metallic taste, abdominal cramps, headaches.

#### **Reproductive toxicity**

No known significant effects or critical hazards.

## **Teratogenicity**

No known significant effects or critical hazards.

## Specific target organ toxicity (single exposure)

No known significant effects or critical hazards.

#### Specific target organ toxicity (repeated exposure)

| Name |            | Route of exposure | Target organs |
|------|------------|-------------------|---------------|
| Lead | Category 2 | -                 | -             |

#### **Aspiration hazard**

No known significant effects or critical hazards.

Information on the likely

routes of exposure

: Routes of entry not anticipated: Dermal.

## Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.

#### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

**Inhalation** : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

**Skin contact**: Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

**Ingestion** : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

## Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

# Section 11. Toxicological information

Not available.

General: May cause damage to organs through prolonged or repeated exposure.

Carcinogenicity : No known significant effects or critical hazards.Mutagenicity : No known significant effects or critical hazards.

**Teratogenicity**: May damage the unborn child.

**Developmental effects**: May cause harm to breast-fed children.

Fertility effects : May damage fertility.

## **Numerical measures of toxicity**

## **Acute toxicity estimates**

Not available.

#### Other information

: To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

## **Section 12. Ecological information**

#### **Toxicity**

| Product/ingredient name | Result   | Species  | Exposure            |
|-------------------------|--|--|---------------------|
| Lead                    | Acute EC50 105 ppb Marine water  | Algae - Chaetoceros sp<br>Exponential growth phase                 | 72 hours            |
|                         | Acute EC50 0.489 mg/l Marine water                                     | Algae - Ulva pertusa   | 96 hours            |
|                         | Acute EC50 8000 µg/l Fresh water                                       | Aquatic plants - Lemna minor                                       | 4 days              |
|                         | Acute LC50 530 μg/l Fresh water  | Crustaceans - Ceriodaphnia reticulata                              | 48 hours            |
|                         | Acute LC50 0.594 mg/l Fresh water                                      | Daphnia - Daphnia magna  | 48 hours            |
|                         | Acute LC50 0.44 ppm Fresh water  | Fish - Cyprinus carpio - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours            |
|                         | Chronic NOEC 0.25 mg/l Marine water Chronic NOEC 0.03 µg/l Fresh water | Algae - Ulva pertusa<br>Fish - Cyprinus carpio                     | 96 hours<br>4 weeks |

## Persistence/degradability

Not available.

## **Bioaccumulative potential**

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------|--------|-----|-----------|
| Rosin, hydrogenated     | 3.42   | -   | low       |

## **Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

#### **Disposal methods**

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## **Section 14. Transport information**

|                            | China          | UN             | IMDG           | IATA           |
|----------------------------|----------------|----------------|----------------|----------------|
| UN number                  | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name    | -              | -              | -              | -              |
| Transport hazard class(es) | -              | -              | -              | -              |
| Packing group              | -              | -              | -              | -              |
| Environmental hazards      | No.            | No.            | No.            | No.            |
| Additional information     | -              | -              | -              | -              |

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 15. Regulatory information

Safety, health and environmental regulations specific for the product

No known specific national and/or regional regulations applicable to this product (including its ingredients).

China inventory (IECSC) : All components are listed or exempted.

List of Goods banned for Importing

None of the components are listed.

**List of Goods banned for Exporting** 

None of the components are listed.

List of Toxic Chemicals Severely Restricted for Importing & Exporting by China

None of the components are listed.

**International regulations** 

## **Montreal Protocol**

Not listed.

**Stockholm Convention on Persistent Organic Pollutants** 

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# Section 15. Regulatory information

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

## **UNECE Aarhus Protocol on POPs and Heavy Metals**

| Ingredient name | List name              | Status |
|-----------------|------------------------|--------|
| Lead bulk       | Heavy metals - Annex 1 | Listed |

#### International lists

**National inventory** 

Australia : Not determined.

**Canada** : All components are listed or exempted.

**Europe** : Not determined.

Japan : Japan inventory (CSCL): Not determined.

Japan inventory (ISHL): Not determined.

Malaysia: Not determinedNew Zealand: Not determined.Philippines: Not determined.

Republic of Korea : All components are listed or exempted.

Taiwan : All components are listed or exempted.

United States : Not determined.

## Section 16. Other information

**History** 

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Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

References : Not available.

**▼** Indicates information that has changed from previously issued version.

#### **Notice to reader**

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