



Health	1
Flammability	0
Reactivity	0
Personal Protection	E

**SAFETY DATA SHEET**  
**Asahi Pure Tin Anode Button**  
**Sn99.99**

*MSDS #: EAM2-3/19*  
*Date of Preparation: February 2013*

**SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION**

**1.1 Product Details:**

Product Name : Asahi Pure Tin Anode Button  
Trade Name : Asahi Pure Tin Anode Button Sn99.99  
Use : Anodes are used for electroplating purposes.

**1.2 Company's Identification:**

Manufacturer's Name and Address : Singapore Asahi Chemical & Solder  
Industries Pte Ltd  
47 Pandan Road  
Singapore 609288

Telephone : (65) 6262-1616  
Facsimile : (65) 6261-6311

**1.3 Contact Point:**

Designation : Chemist  
Emergency Telephone Number: (65) 6262-1616

**SECTION 2: HAZARD IDENTIFICATION**

**GHS classification**

Acute Toxicity - Oral : Classification 5

**GHS label elements**

Display Image or a Symbol : No display image

**GHS Signal Word**

: Warning

**GHS Hazard Statement**

: H303 May be harmful if swallowed.  
H333 May be harmful if inhaled.

**GHS Precautionary Statement:**

**Prevention**

P202

Do not handle until all safety precautions have been read and

P260 understood.  
 Avoid inhaling dust.  
 P264 Wash hands thoroughly after handling.

**Response**  
 P312 Call a POISON CENTER or doctor/physician if you feel unwell.

**Storage**  
 P410 Protect from sunlight.

**Disposal**  
 P501 Dispose of contents or container to appropriate waste site in accordance with local and national regulations.

**Other Hazards which do not result in Classification** : Inhalation of soldering fumes may cause stimulation of throat and nose feeling sick.

**Effect on Environment** : No relevant information found.

**Physical and Hazardous Effect** : No relevant information found.

**SECTION 3: COMPOSITION/INFORMATION ON MATERIAL**

Chemical Name	CAS No.	%	OSHA PEL(mg/m <sup>3</sup> )	ACGIH TLY (mg/m <sup>3</sup> )	Other Limits Recommended
Tin (Sn)	7440-31-5	99.99	2.0	2.0	
Others		0.01			
<b>Total</b>		<b>100</b>			

**SECTION 4: FIRST AID MEASURES**

Ingestion : Seek medical attention.  
 Eye Contact : Flush eyes with plenty of water immediately for at 15 minutes. Seek medical attention.  
 Skin Contact : Wash thoroughly with soap and warm water.  
 Inhalation : Evacuate to a safe area with fresh air.

**SECTION 5: FIRE-FIGHTING MEASURES**

Extinguishing Media : NA  
 Fire Fighting Instructions : NA  
 Special Hazards : NA  
 Unusual Fire and Explosion Hazards : NA

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

Leak/Spill : Place into properly labeled waste container and may be sent for recovery following appropriate recovery routes or methods.

## **SECTION 7: HANDLING AND STORAGE**

Handling : Wash hand thoroughly with soap and water prior to eating, drinking or smoking. Do not smoke while soldering. Avoid inhalation of vapors and contact with skin and eyes. Observe good industrial practices.

Storage : Store in a cool environment away from oxidizing agents.

## **SECTION 8: EXPOSURE CONTROL AND PERSONAL PROTECTION**

Engineering Measures : Maintain general or local exhaust ventilation to meet exposure limit requirements.

Personal Protection : Operator should be protected from fumes during electroplating process

PROTECTIVE GLOVES : Impervious rubber

EYE PROTECTION : Safety glasses

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : Metallic buttons

Odor : No odor

Solubility in water: : NA

Boiling Point(°C) : 600°C

Melting Point(°C) : 232°C

Vapor Pressure(mm of Hg at 20°C) : NA

Vapour Density (air=1) : NA

Percentage Volatiles (by Volume) : NA

Volatile Organic Compound (VOC) : NA

Evaporation Rate (butyl acetate=1) : NA

Specific Gravity (water=1 at 25°C) : 7.30

Flash Point (°C) : NA

Auto-ignition Temperature(°C) : NE

## **SECTION 10: PHYSICAL HAZARDS (STABILITY AND REACTIVITY)**

Condition to avoid : Unknown.

Incompatibles : Oxidizing materials.

Decomposition products : Unknown.

Hazardous polymerization : Will not occur.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

Toxicity data : Triethyltin increased absorption in the body and is highly toxic, Triethyltin and other organic Sn compounds cause brain dysfunction and cerebral fluid retention

Carcinogenicity : Not listed

Reproductive Effect : None

Effects of overexposure (Chronic Effect): Breathing of vapors may produce respiratory irritation. Long term inhalation of tin and insoluble tin compounds may cause tin dust lungs (stannosis). Chronic Inhalation of Sn in the form of fumes or dust particles leads to benign pneumoconiosis

Target Organs : Gastro-intestinal tract, bones, kidneys and the liver

Medical Conditions Generally Aggravated by Exposure : Fumes may irritate the eyes.

## **SECTION 12: ECOLOGICAL INFORMATION**

Mobility & Bioaccumulation : Non volatile material

Biodegradability : Non biodegradable

Aquatic Toxicity : Aquatic toxicity of inorganic tin compounds is comparable to that of lead. Organic tin compounds are toxic to the aquatic ecosystems.

## **SECTION 13: DISPOSAL INFORMATION**

Dispose according to federal, state and local regulations. This product is suitable for recovery following appropriate recovery routes or methods. If in doubt, contact Singapore Asahi.

## **SECTION 14: TRANSPORT INFORMATION**

UN Number : NA

T.D.G. Classification : NA

Packing group : NA

Special shipping instruction : NA

## **SECTION 15: REGULATORY INFORMATION**

- a. Proposed classification : Harmful.
- b. Risk phrase
- R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
  - R33 Danger of cumulative effect.
  - R36/37/38 Irritating to the eyes, respiratory system and skin.
- c. Safety phrase
- S3/9/14 Keep in a cool, well ventilated place away from oxidizing agents.
  - S13 Keep away from food, drink and animal feeding stuff.
  - S23 Do not breathe fume or vapor.
  - S24/25/26/28 Avoid contact with skin or eyes. In case of contact with skin,

- rinse immediately with plenty of water. After contact with skin, wash immediately with plenty of water.
- S35 This material with its container must be disposed of in a safe manner.
  - S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
  - S44 If feeling unwell, seek medical advice.
  - S46 If swallowed seek medical advice immediately.
  - S51 Use only in well ventilated areas.
  - S59 Refer to manufacturer/supplier for information on recovery/recycling.

## **SECTION 16: OTHER INFORMATION**

THIS INFORMATION RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. SUCH INFORMATION IS TO THE BEST OF THE COMPANY'S KNOWLEDGE AND BELIEVED ACCURATE AND RELIABLE AS OF THE DATE INDICATED.

HOWEVER, NO REPRESENTATION, WARRANTY OR GUARANTEE IS MADE AS TO ITS ACCURACY, RELIABILITY OR COMPLETENESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY AND COMPLETENESS OF SUCH INFORMATION FOR HIS OWN PARTICULAR USE.

\*optional

NE = Not Established

NA = Not Applicable

PEL = Permissible Exposure Level