

**Material Safety Data Sheet**  
To comply with 29CFR 1910.1200  
OSHA's Hazard Communication Standard

Fast Chip Part Numbers: FASTCHIP4.5-LD, FASTCHIP8-LF, FASTCHIP16-LF, FASTCHIP32-LF, SMDKIT4.5-LF, SMDKIT-LF

## Tin/Bismuth/Indium Alloys

### 1. PRODUCT AND COMPANY INFORMATION

SRA Soldering Products  
24 Walpole Park South  
STE 10  
Walpole, MA 02081

Emergency Telephone: 1-800-535-5053 (INFOTRAC)  
Telephone: 508-668-6044

### 2. HAZARD IDENTIFICATION

**GHS Classification:**

Warning



**GHS Label Elements:**

**H Codes:** H302,  
Harmful if swallowed

**P Codes:**

P264, 270, 281, 301+312, 501, 312, 271, 301+312, 405, 201, 202, 314, 308+313

Do not handle until all safety precautions have been read & understood. Do not Get in eyes, on skin, or on clothing. Use in well ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation use respiratory protection. Do not eat, drink, or smoke when using this product. IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Immediately call POSION CENTER/Doctor. Get medical advice/attention if you feel unwell. Wash thoroughly after use. Dispose of contents/container in accordance with local/regional/national/international regulations for disposal. Keep out of reach of children. Read label and SDS prior to use.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component	CAS #	OSHA TWA	ACIGH TWA	Other limits	%
Tin	7440-31-5	2mg/M3	2mg/M3	NE	20-40
Bismuth	7440-69-9	NE	NE	NE	50-70
Indium	7440-74-6	0.1mg/M3	0.1mg/M3	NE	2-20

Only those ingredients listed in this section have been determined to be hazardous as defined in 29CFR 1910.1200.  
An ingredient marked with an asterisk(\*) is also listed in 29CFR 1910.1200(0) #4 as a known or suspected cancer hazard.

+ denotes a chemical regulated as toxic by the Environmental Protection Agency (EPA) as outlined in 40CFR Part 372 (section 313)

## 4. FIRST AID MEASURES

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**Signs and symptoms of exposure:** Inhalation-Nose & throat irritation, headache, dizziness, difficulty breathing, coughing. Ingestion-nausea, vomiting, cramps. Skin-redness, burning, rash, dryness. Eye-redness, burning, tearing, blurred vision.

**Medical conditions aggravated by exposure:** Skin, kidney and respiratory conditions.

**Emergency first aid procedures:**

Skin: Flush with water immediately - Seek medical attention if necessary

Eyes: Flush with water for 15 minutes - Seek medical attention

Ingestion: DO NOT induce vomiting, drink large amounts of water - seek medical attention. Never give anything by mouth to an unconscious person

Inhalation: Remove to fresh air. Support respiration if required - Seek medical attention

## 5. FIREFIGHTING MEASURES

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**Extinguishing media:** dry chemical.

**Special fire fighting procedures:** use self sustaining respiratory suit.

**Unusual Fire and Explosion Hazards:** May release Toxic metal & oxide fumes. High concentrations of dust may present explosion hazard. Water trapped below molten may explode thus spattering molten metal.

## 6. ACCIDENTAL RELEASE MEASURES

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**Methods and materials:** Flush into chemical sewer or sweep up with a suitable absorbent. Wear adequate protection as described in section 8.

**Environmental Precautions:** Avoid release to the environment. Collect spillage.

## 7. HANDLING & STORAGE

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Wash thoroughly after use. Wash contaminated clothing before reuse. Store in a closed corrosive resistant container, with corrosive resistant liner, in cool dry place. Keep out of the reach of children. Read label and SDS prior to use.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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**Occupational Exposure Limit Values:** See section 3.

Respiratory Protection (type): HEPA mask required for fumes above TWA.

Ventilation: Local Exhaust preferred Special: NE

Mechanical: OK Other: NE

Protective Gloves: plastic or rubber Eye Protection: Goggles or face shield

Other Protective Clothing or Equipment: as required to avoid contact.

Work/Hygienic Practices: Wash after use. Follow good industrial hygienic practices.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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Boiling Point: 2840 F

Specific Gravity: 7.0

Vapor Pressure (mm Hg): NE

Melting: <200F

Vapor Density: NE

Evaporation Rate: <1 (butyl acetate=1)

Solubility in water: negligible

pH: NE

Flash Point: NE (TOC)

Flammable Limits: lcl: NE ucl: NE

Appearance and odor: Silver/Grey solid, odorless.

## 10. STABILITY AND REACTIVITY

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**Stability :** STABLE Conditions to avoid : none

**Incompatibility (materials to avoid):** strong bases & acids, oxidizers, sulfides, halogens.

**Hazardous Decomposition or Byproducts (incomplete combustion):** May release Toxic metal & oxide fumes. High concentrations of dust may present explosion hazard. Water trapped below molten may explode thus spattering molten metal.

**Hazardous Polymerization:** WILL NOT OCCUR Conditions to avoid: none

## 11. TOXICOLOGICAL INFORMATION

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**Routes of entry:** Inhalation: no Skin: no Ingestion: yes

**Health Hazards (acute and chronic):**

Gross ingestion maybe toxic and can result in death. Symptoms of toxicity may take hours to manifest. Ingestion may result in kidney, red blood cell, reproductive and nervous system effects.

**Carcinogenicity:** not determined NPT? no IARC Monographs? Lead-suspect

## **12. ECOLOGICAL INFORMATION**

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**Toxicity:** NE  
**Bio-accumulative Potential:** NE  
**PBT & vPvB Assessment:** NE

**Persistence & Degradability:** NE  
**Mobility in Soil:** NE  
**Other Adverse Effects:** NE

## **13. DISPOSAL CONSIDERATIONS**

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**Waste Disposal Method:** dispose of in accordance with all local state and federal regulations

**Other Precautions:** Avoid skin & eye contact, inhalation & ingestion of fumes and material. Wash contaminated clothing before reuse. Keep away from children.

## **14. TRANSPORT INFORMATION**

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**DOT Classification:** Non-Hazardous  
**Marine Pollutant:** NE

## **15. REGULATORY INFORMATION**

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NFPA Classification (NFPA 325M, 8th edition)(Health, Flammability, Reactivity): 2-0-0  
This product contains components known to the state of California to cause cancer or reproductive harm.

## **16. OTHER INFORMATION**

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The information and recommendations contained within the publication have been compiled from sources believed to be reliable and to represent the best information available to **SRA Soldering Products** at the time of issue. No warranty, guarantee, or representation is made by **SRA Soldering Products** nor does **SRA Soldering Products** assume any responsibility in connection there within; nor can it be assumed that all acceptable safety measures or other safety measures may not be required under particular or exceptional conditions or circumstances.

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NE = not established NA = not applicable

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