

MATERIAL SAFETY DATA SHEET

For 29CFR 1910.1200 OSHA HCS

1. PRODUCT AND COMPANY INFORMATION

247 Solder

Part Number: 247-REMALLOW4.5-LF, 247-REMALLOW8-LF, 247-REMALLOW16-LF, 247-REMALLOW32-LF

Part Name: Lead-Free SMT Removal Alloy 4.5ft, 8ft, 16ft, 32ft

Emergency Telephone CHEMTREC 1-(800)-424-9300

Revised 10/16/2020 by 247 Solder

2. HAZARD IDENTIFICATION

GHS Classification:

Acute Toxicity 4, Aquatic Acute 1, Skin Irritant 2, Eye Irritant 2A

GHS Label Elements:

H Codes: H302, H332, H410, H315, H319

Harmful if swallowed

Harmful if inhaled

May cause skin irritation

Very toxic to aquatic life with long lasting effects

P Codes:

P264, 270, 281, 301+312, 330, 501, 260, 312, 330, 261, 271, 301+312, 304+340, 405, 273, 305+351+338, 201, 202, 314, 391, 308+313

Do not handle until all safety precautions have been read & understood. Avoid breathing dust/mist/vapors/fumes/spray. Do not get in eyes, on skin, or on clothing. Use in a well ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation use respiratory protection. Do not breathe dust/fume/gas/mist/vapor/spray. Do not eat, drink or smoke when using this product. IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Immediately call a POISON CENTER/Doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Wash with soap & water. Get medical advice/attention if skin irritation or rash occurs or if you feel unwell.

IF INHALED: Remove victim to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. Immediately call POISON CENTER/Doctor.

Wash thoroughly after use. Wash contaminated clothing before reuse. Store in a closed compatible container in cool dry place. Avoid release to the environment. Dispose of contents/container in accordance with specified local/regional/national/international regulations for disposal. Keep out of the reach of children. Read label and MSDS prior to use.

3. COMPOSITION/INFORMATION ON INGREDIENTS

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

Only those ingredients listed in this section have been determined to be hazardous as defined in 29CFR 1910.1200.

4. FIRST AID MEASURES

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

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 metal may explode thus spattering molten metal.

6. ACCIDENTAL RELEASE MEASURES

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

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 MSDS prior to use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Boiling Point: 2840 F Specific Gravity: 9.0

Vapor Pressure (mm Hg): NE Melting Point: 291 F

Vapor Density: NE Evaporation Rate: <1 (butyl acetate=1)

Solubility in water: negligible pH: NE

Flash Point: NE (TOC) Flammable Limits: lel: NE uel: NE

Appearance and odor: Silver/Grey solid, odorless.

10. STABILITY AND REACTIVITY

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 metal may explode thus spattering molten metal.

Hazardous Polymerization: Will not occur. Conditions to avoid: none

11. TOXICOLOGICAL INFORMATION

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

Health Hazards (acute and chronic): Contact with dust and fumes may cause skin, eye and respiratory irritation. Ingestion and/or inhalation of material or fumes may result in flu like symptoms, insomnia, muscle weakness, nausea and abdominal pain. Gross inhalation or ingestion may be toxic and can result in death. Symptoms of toxicity may take hours or days to manifest. Chronic exposures, inhalation and ingestion, may result in kidney, red blood cell, reproductive and nervous system effects. Health effects may be cumulative over many exposures. Studies show that health risks vary by individual. Minimize exposure as a precaution. See OSHA 29CFR 1910.1025(subpart Z) for more information.

Carcinogenicity: not determined NPT? no IARC Monographs? no

12. ECOLOGICAL INFORMATION

Toxicity: NE **Persistence & Degradability:** NE

Bio-accumulative Potential: NE **Mobility in Soil:** NE
PBT & vPvB Assessment: NE **Other Adverse Effects:** NE

13. DISPOSAL CONSIDERATIONS

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

DOT Classification: Non-Hazardous

Marine Pollutant: NE

15. REGULATORY INFORMATION

NFPA Classification (NFPA 325M, 8th edition) (Health, Flammability, and Reactivity): 2-0-0

This product contains components known to the state of California to cause cancer or reproductive harm.

16. OTHER INFORMATION

This MSDS displays the best information available to 247 Solder at the time of issue. No warranty, guarantee, or representation is made. 247 Solder does not assume any responsibility for this information. Other safety measures may be required under particular conditions.

NE = not established NA = not applicable