

# Material Safety Data Sheet

## SOLDER, RED

Carolina Biological Supply Company

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Revised 11/19/99

Replaces (None)

Printed 9/01

### 1. Product Description

**Product Name:** Solder, 98% Tin/2% Silver  
**Product Code (s):** Various  
**Size:** Various  
**Chemical Name:** Product is a mixture  
**CAS Number:** See section 2  
**Formula:** Product is a mixture  
**Synonyms:** N/A  
**Distributor:** Carolina Biological Supply Company  
2700 York Road  
Burlington, NC 27215

**Chemical Emergency Information:**  
800-227-1150 (8am-5pm [ET] M-F)  
**Chemtrec (Transportation Spill Response 24 hours):**  
800-424-9300

### 2. Composition/Information on Ingredients

#### Principal Hazardous Components:

Tin (CAS# 7440-31-5) 98%

Silver (CAS# 7440-22-4) 2%

#### TLV and PEL units:

Tin	ACGIH-TLV	2 mg/m <sup>3</sup> (TWA)
	OSHA-PEL	2 mg/m <sup>3</sup> (TWA)
Silver	ACGIH-TLV	0.1 mg/m <sup>3</sup> (TWA)
	OSHA-PEL	0.01 mg/m <sup>3</sup> (TWA)

### 3. Hazardous Identification

**Emergency Overview:** May cause irritation. During use minimize contact with skin. Avoid contact with eyes. Wash thoroughly after handling. When not in use keep in tightly closed container.

### 4. First Aid Measures

#### Emergency and First Aid Procedures:

**Eyes** - Flush with water for at least 15 minutes, raising and lowering eyelids occasionally. Get medical attention if irritation persists.

**Skin** - Thoroughly wash exposed area for at least 15 minutes. Remove contaminated clothing. Launder contaminated clothing before reuse. Get medical attention if irritation persists.

**Ingestion** - If swallowed, if conscious, give plenty of water and induce vomiting immediately as directed by medical personnel. Immediately call a physician or poison control center. Never give anything by mouth to an unconscious person.

**Inhalation** - Remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has stopped. Keep person warm, quiet, and get medical attention.

### 5. Firefighting Procedures

**Flash Point (Method Used):** N/A

**NFPA Rating:** Health: 1

Fire: 2

Reactivity: 0

**Extinguisher Media:** Use media suitable to extinguish surrounding fire

**Flammable Limits in Air % by Volume:** N/A

**Autoignition Temperature:** N/A

**Special Firefighting Procedures:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

**Unusual Fire and Explosion Hazards:** Flux may ignite in fire conditions

### 6. Spill or Leak Procedures

#### Steps to be Taken in Case Material is Released or Spilled:

Material may be scraped or picked up once cooled. Containerize material for disposal.

### 7. Special Precautions

**Precautions to be Taken in Handling or Storing:** Keep container tightly closed

**Other Precautions:** Suitable for any general chemical storage area. Store away from sulfur.

### 8. Special Protection Information

**Respiratory Protection (Specify Type):** None needed under normal conditions of use with adequate ventilation. NIOSH approved equipment should be worn if PELs are exceeded.

**Ventilation:** Local Exhaust: Not necessary

Mechanical (General): Yes

Special: No

Other: No

**Protective Gloves:** Rubber, neoprene, PVC, or equivalent

**Eye Protection:** Splash proof chemical safety goggles should be worn at all times

**Other Protective Clothing or Equipment:** Lab coat, eye wash, and safety shower

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## SOLDER, RED (cont.)

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### 9. Physical Data

**Molecular Weight:** Product is a mixture

**Melting Point:** 221 °C

**Boiling Point:** N/A

**Vapor Pressure:** N/A

**Vapor Density (Air-1):** N/A

**Specific Gravity (H<sub>2</sub>O=1):** >1

**Percent Volatile by Volume:** N/A

**Evaporation Rate (Ether=1):** N/A

**Solubility in Water:** Insoluble

**Appearance and Odor:** Odorless, silvery-white metal

### 10. Reactivity Data

**Stability:** Stable

**Conditions to Avoid:** None

**Incompatibility (Materials to Avoid):** Strong acids and bases, sulfur, halogens

**Hazardous Decomposition Products:** Aliphatic aldehydes and acids

**Hazardous Polymerization:** Will not occur

### 11. Toxicity Data

**Toxicity Data:** None established for this mixture

**Effects of Overexposure:**

Acute: See section 3

Chronic: No chronic effects data cited

**Conditions Aggravated by Overexposure:** Irritation of upper respiratory tract. Severe irritation or burns to the skin or eyes.

**Target Organs:** Diseases of the lung

**Primary Route(s) of Entry:** Inhalation, eye and skin contact

### 12. Ecological Data

**EPA Waste Numbers:** None

### 13. Disposal Information

**Waste Disposal Methods:** Dispose in accordance with all applicable federal, state and local regulations

Always contact a permitted waste disposer (TSD) to assure compliance

### 14. Transport Information

**Description:** Non-regulated

### 15. Regulatory Information

**EPA TSCA Status:** On TSCA Inventory

**Hazard Category for SARA Section 311/312 Reporting:** Acute

#### SARA Sec. 313

Product or Components	SARA EHS Sec. 302 TPQ	Chemicals Name List	CERCLA RCRA Chemical Category	Sec. 103 RQ lbs.	Sec. 261.33
Tin	No	No	No	No	No
Silver	No	Yes	No	1000	No

### 16. Additional Information

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

#### Glossary

**ACGIH** American Conference of Governmental Industrial Hygienists

**CAS Number** Chemical Services Abstract Number

**CERCLA** Comprehensive Environmental Response, Compensation, and Liability Act

**DOT** U.S. Department of Transportation

**IARC** International Agency of Research on Cancer

**N/A** Not Available

**NTP** National Toxicology Program

**OSHA** Occupational Safety and Health Administration

**PEL** Permissible Exposure Limit

**ppm** parts per million

**RCRA** Resource Conservation and Recovery Act

**SARA** Superfund Amendments and Reauthorization Act

**TLV** Threshold Limit Value

**TSCA** Toxic Substances Control Act