

# Tin - Silver Solder

THERMADYNE

# VICTOR®

## MATERIAL SAFETY DATA SHEET

CHEMTREC Phone No. (800) 424 - 9300

Victor Equipment Company  
2800 Airport Road  
Denton, Texas 76207

(940) 566 - 2000  
Fax: (940) 381 - 1265

This MSDS is based on air/fuel or oxy/fuel process.  
There may be other cautions for electric process.

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Form Number: 0056-1283  
Core Part No: 1440-0017

### Material Safety Data Sheet

#### SECTION I - MATERIAL IDENTIFICATION

**Product Name:** Tin-Silver Solder (1440-0017) SFAG-8-5

**Product Use:** Soldering

#### SECTION II - HAZARDOUS INGREDIENTS

OSHA Hazardous Components (29 CFR 1910.1200) EXPOSURE LIMITS: 8 HR. TWA

		OSHA PEL	ACGIH TLV	
Tin, Sn	(CAS # 7440-31-5)	2.0 mg/m <sup>3</sup>	2.0 mg/m <sup>3</sup>	metal
Silver, Ag	(CAS # 7440-22-4)	0.1 mg/m <sup>3</sup>	0.01 mg/m <sup>3</sup>	metal

#### SECTION III - HAZARDS IDENTIFICATIONS

**EMERGENCY OVERVIEW:** Gas irritating to eyes and respiratory tract. Dust extremely irritating to respiratory tract.

**POTENTIAL HEALTH EFFECTS:**

**INHALATION:** Fumes or dust moderately irritating to eyes and respiratory tracts.

**EYE CONTACT:** Fumes or dust cause eye irritation.

**SKIN CONTACT:** No hazard in normal industrial use. Exposure to hot material may cause thermal burns.

**INGESTION:** No hazard in normal industrial use. No adverse health effects anticipated.

**CHRONIC:** Overexposure may cause lung damage.

**CARCINOGENICITY:** LISTED IN NTP? No IARC? No OSHA Regulated? No

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### SECTION IV - FIRST AID MEASURES

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- INHALATION:** No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.
- EYE CONTACT:** Immediately flush eyes with plenty of water. Get medical attention if irritation persists. If exposed to fumes or vapors, flush eyes with large amounts of water for at least 15 minutes.
- SKIN CONTACT:** Remove contaminated clothing. Wash skin with soap and water. Get medical attention.
- INGESTION:** Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention.

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### SECTION V - FIRE FIGHTING MEASURES

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- Flashpoint (Method):** Non-Flammable material
- Flammable Limits:** Lower: NA Upper: NA
- Autoignition Temperature:** NA

- GENERAL HAZARD:** Material will not burn. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
- FIRE FIGHTING INSTRUCTIONS:** As in any fire, wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear.
- EXTINGUISHING MEDIA:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
- HAZARDOUS COMBUSTION PRODUCTS:** Smoke, oxides of carbon, aluminum, and tin.

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### SECTION VI - ACCIDENTAL RELEASE MEASURES

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- LAND SPILL:** Vacuum or sweep up material and place in a disposal container. Do not flush to sewer.
- WATER SPILL:** Collect and place in a chemical waste container for disposal.

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### SECTION VII - HANDLING AND STORAGE

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Wash thoroughly after handling. Use only in a well ventilated area. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Store in a cool dry place.

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### SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

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**ENGINEERING CONTROLS:** Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

**PERSONAL PROTECTION:** If TLV exceeded, NIOSH approved respirator recommended.

**PROTECTIVE CLOTHING:** Wear safety glasses with side shields (or goggles) and a face shield.

### SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

<b>Vapor Pressure:</b>	NA	<b>Vapor Density (Air=1):</b>	NA
<b>Specific Gravity:</b>	7.1	<b>Evaporation Rate</b>	
<b>Solubility in Water:</b>	Insoluble	<b>(n-Butyl Acetate=1):</b>	NA
<b>pH:</b>	NA	<b>Freezing Point:</b>	NA
<b>Boiling Point:</b>	Decomposes		
<b>Appearance &amp; Odor:</b>	Silver-white metal wire with no odor.		

### SECTION X - STABILITY AND REACTIVITY

**GENERAL:** Stable

**INCOMPATIBLE MATERIALS:** Strong acids, sulfur, chlorine, sodium and potassium peroxide oxidizers.

**CONDITIONS TO AVOID:** Open flames.

**HAZARDOUS POLYMERIZATION:** Will not occur.

### SECTION XI - TOXICOLOGICAL INFORMATION

No data available.

### SECTION XII - ECOLOGICAL INFORMATION

No data available.

### SECTION XIII - DISPOSAL CONSIDERATIONS

Classification required before disposal. Follow all federal, state and local requirements.

### SECTION XIV - TRANSPORTATION INFORMATION

**PROPER SHIPPING NAME:** Tin - Silver Solder, not regulated.  
**HAZARD CLASS:** None  
**IDENTIFICATION NUMBER:** None  
**DOT Emergency Guide #:** None  
**Reportable Quantity (RQ):** None

### SECTION XV - REGULATORY INFORMATION

**TSCA (Toxic Substance Control Act)** All components are listed on the TSCA inventory.

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**CERCLA (Comprehensive Environmental Response, Compensation and Liability Act):**

None. We recommend you contact local authorities for other reporting requirements.

**SARA TITLE III (Superfund Amendments and Reauthorization Act):**

311/312 Hazard Categories: Acute

313 Reportable Ingredients: Silver compounds (6%)

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### SECTION XVI - OTHER INFORMATION

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Soldering wire is a non-hazardous solid at ambient temperature. Hazards, as defined by OSHA 29 CFR 1910.1200, may result from fume generated during soldering. It is recommended that the composition of the fumes, gases, and dust to which the workers are exposed be classified by sampling the air in the worker's breathing zone and performing a hazard evaluation. See ANSI/AWS f1.1 available from the American Welding Society, P.O. Box 351040, Miami, FL 33135.

**PREPARED BY:**

**TALEM, Inc. - Technical Services Division**

**(817) 335 - 1186**

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**FOOTNOTES:**

NA - Not Applicable    NE - Data Not Established    CS - Cancer Suspect Agent    OX - Oxidizer    ND - No Data    Cor - Corrosive

CALC - Calculated    EST - Estimated    STEL - Short Term Exposure Limit    TLV - Threshold Limit Value

PEL - Permissible Exposure Limit    TWA - Time Weighted Average, 8 hours

THE INFORMATION RELATES TO THIS SPECIFIC MATERIAL. IT MAY NOT BE VALID FOR THIS MATERIAL IF USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY ONESELF AS TO THE SUITABILITY AND COMPLETENESS OF THIS INFORMATION FOR HIS OWN PARTICULAR USE. NEITHER THE SELLER NOR PREPARER MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE INFORMATION PRESENTED.