

# Hardfacing Electrode Buildup Rod

THERMADYNE

# VICTOR®

## MATERIAL SAFETY DATA SHEET

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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: 0056-1348  
Core Part No: 1440-0082

### Material Safety Data Sheet

## SECTION I - MATERIAL IDENTIFICATION

**Product Name:** Hardfacing Electrode Buildup Rod (1440-0082)

**Product use:** Coated buildup manganese and low alloy electrodes for shielded arc welding.

## SECTION II - HAZARDOUS INGREDIENTS

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

		OSHA PEL	ACGIH TLV	
Iron, Fe	CAS# 7439-89-6	10.0 mg/m <sup>3</sup>	10.0 mg/m <sup>3</sup>	
Manganese, Mn	CAS# 7439-96-5	1.0 mg/m <sup>3</sup>	1.0 mg/m <sup>3</sup>	
Silicon, Si	CAS# 7440-21-3	10.0 mg/m <sup>3</sup>	10.0 mg/m <sup>3</sup>	
Titanium dioxide	CAS# 13463-67-7	5.0 mg/m <sup>3</sup>	10.0 mg/m <sup>3</sup>	Dust
Calcium carbonate	CAS# 1317-65-3	10.0 mg/m <sup>3</sup>	10.0 mg/m <sup>3</sup>	Dust
Nickel, Ni	CAS# 7440-02-6	1.0 mg/m <sup>3</sup>	1.0 mg/m <sup>3</sup>	
Chromium, Cr	CAS# 7440-47-3	1.0 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>	Fume
Molybdenum	CAS# 7439-89-6	10.0 mg/m <sup>3</sup>	10.0 mg/m <sup>3</sup>	
Fluoride	CAS# 7789-75-5	2.5 mg/m <sup>3</sup>	2.5 mg/m <sup>3</sup>	

## SECTION III - HAZARDS IDENTIFICATIONS

**“Warning:** This product contains or produces a chemical known to the State of California to cause cancer. (California Health & Safety Code Sec. 25249.5 *et seq.*)”

**EMERGENCY OVERVIEW:** Dust and/or fumes irritating to eyes and respiratory tract. Can decompose at high temperatures forming toxic gases.

### POTENTIAL HEALTH EFFECTS:

**INHALATION:** Dust and fumes moderately irritating to eyes and respiratory tracts. Prolonged or repeated inhalation may cause lung damage. Short term exposure may cause dizziness and nausea.

**EYE CONTACT:** Dust and fumes may cause eye irritation.

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**SKIN CONTACT:** No hazard in normal industrial use.

**INGESTION:** Irritating to mouth, throat and stomach.

**CHRONIC:** Prolonged or repeated inhalation may cause lung damage (siderosis) and effect the central nervous system (contains Manganese). Suspect cancer agent (contains Chromium and Nickel)

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

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### SECTION IV - FIRST AID MEASURES

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**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:** Wash with soap and water. Get medical attention if irritation develops or persists.

**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:** Use dry sand or earth to smother fire.

**HAZARDOUS COMBUSTION PRODUCTS:** Smoke, oxides of carbon, chlorides, and metal alloys.

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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. Collect scrap for remelting. Do not flush into sewer.

**WATER SPILL:** Collect and place in chemical waste container for disposal. Do not flush to sewer.

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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 fume respirator recommended.

**PROTECTIVE CLOTHING:** Wear safety glasses with side shields (or goggles) and a face shield. When material is heated, wear gloves to protect against thermal burns.

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### SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

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<b>Vapor Pressure:</b>	NA	<b>Vapor Density (Air=1):</b>	NA
<b>Specific Gravity:</b>	8.5	<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>	Solid wire. No odor.		

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### SECTION X - STABILITY AND REACTIVITY

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**GENERAL:** Stable

**INCOMPATIBLE MATERIALS:** Strong acids.

**CONDITIONS TO AVOID:** None.

**HAZARDOUS POLYMERIZATION:** Will not occur.

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### SECTION XI - TOXICOLOGICAL INFORMATION

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No data available.

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## SECTION XII - ECOLOGICAL INFORMATION

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No data available.

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## SECTION XIII - DISPOSAL CONSIDERATIONS

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

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## SECTION XIV - TRANSPORTATION INFORMATION

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**PROPER SHIPPING NAME:** Hardfacing Electrode Buildup Rod, not regulated.  
**HAZARD CLASS:** None  
**IDENTIFICATION NUMBER:** None  
**DOT Emergency Guide #:** None  
**Reportable Quantity (RQ):** None

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## SECTION XV - REGULATORY INFORMATION

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

**CERCLA (Comprehensive Environmental Response, Compensation and Liability Act):**  
None. We recommend that you contact local authorities for other reporting requirements.

**SARA TITLE III (Superfund Amendments and Reauthorization Act):**  
311/312 Hazard Categories: Acute, Chronic

313 Reportable Ingredients: Manganese compounds (5%), Nickel (1%), Chromium (10-30%)

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## SECTION XVI - OTHER INFORMATION

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Brazing rod or wire is a non-hazardous solid at ambient temperature. Hazards, as defined by OSHA 29 CFR 1910.1200, may result from fume or dust generated during brazing. The composition and quantity of both are dependent upon the metal being brazed and the procedures being used. Other conditions which influence the hazards associated with brazing include the filler material, the coatings on the metal, the number of people being exposed, and the quality of the ventilation. 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.