

# MALINCO.

5400 SMITH ROAD • BROOK PARK, OHIO 44142  
PHONE (216) 267-8080 FAX (216) 267-9077  
www.malinco.com



## Safety Data Sheet Music Wire

### SAFETY DATA SHEET

#### 1. PRODUCT AND SUPPLIER IDENTIFICATION

Product Name: Carbon Steel Wire

Other: AISI 1002-1095, 9254, hard drawn, oil tempered, patented, annealed, brush, music

Supplier: Malin Co.  
5400 Smith Road  
Brook Park, Ohio 44142

Phone: (216) 267-9080

#### 2. HAZARD IDENTIFICATION

GHS Classification (29 CFR 1910.1200): Not classified as hazardous

GHS Label Elements: N/A

Signal Word: N/A

Hazard Statements: N/A

Precautionary Statement: N/A

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS#	%	EC#
Iron	7439-89-6	95-99	231-096-4
Carbon	7440-44-0	0.01-1.1	231-153-3
Manganese	7439-96-5	0.25-1.65	231-105-1
Phosphorous	7723-14-0	0.00-0.04	231-768-7
Silicon	7440-21-3	0.0-1.6	231-130-8
Sulfur	7704-34-9	0.000-0.035	231-722-6
Lead	7439-92-1	0.000-0.005	231-096-4
Vanadium	7440-62-2	0.00-0.35	231-171-1
Chromium	7440-47-3	0.0-1.5	231-157-5

##### Optional Coatings

Petroleum Distillates	64742-52-5	0.0-1.0	265-155-0
	64741-86-2	0.0-1.0	265-088-7
	64741-97-5	0.0-1.0	265-098-1
Phosphate	14265-44-2	0.0-1.0	
Borax	1303-96-4	0.0-1.0	215-540-4
Lime	1305-62-0	0.0-1.0	215-137-3
Drawing Lubricant	1592-23-0	0.0-1.0	
	822-16-2	0.0-1.0	212-490-5

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## 4. FIRST AID MEASURES

**General Measures:** Under normal handling and use, exposure to solid forms of this material present few health hazards. Subsequent operations such as grinding, melting or welding may produce potentially hazardous dust or fumes which can be inhaled or come in contact with the skin or eyes.

**INHALATION:** Remove to fresh air, keep warm and quiet, and give oxygen if breathing is difficult. Seek medical attention.

**INGESTION:** Rinse mouth with water. Do not induce vomiting. Seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person.

**SKIN:** Remove contaminated clothing, brush material off skin, and wash affected area with soap and water. Seek medical attention if symptoms persist.

**EYES:** Flush eyes with lukewarm water, including under upper and lower eyelids, for at least 15 minutes. Seek medical attention if symptoms persist.

**Most Important Symptoms/Effects, Acute and Delayed:** May cause irritation. See section 11 for more information.

**Indication of Immediate Medical Attention and Special Treatment:** No other relevant information available.

## 5. FIREFIGHTING MEASURES

**Extinguishing Media:** Use suitable extinguishing media for surrounding material and type of fire.

**Unsuitable Extinguishing Media:** No information available.

**Specific Hazards Arising from the Material:** This product does not present fire or explosion hazards as shipped. Small chips, fine turnings, and dust from processing may be ignitable. May emit metal oxide fumes under fire conditions.

**Special Protective Equipment and Precautions for Firefighters:** Full face, self-contained breathing apparatus and full protective clothing when necessary.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment, and Emergency Procedures:** Wear appropriate respiratory and protective equipment specified in section 8. Avoid dust formation. Avoid contact with skin and eyes. Avoid breathing dust and fumes.

**Methods and Materials for Containment and Cleaning Up:** Sweep or scoop up. Place in closed container for further handling and disposal. Scrap can be collected for recycling.

**Environmental Precautions:** Do not allow to enter drains or to be released to the environment.

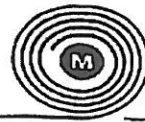
## 7. HANDLING AND STORAGE

**Precautions for Safe Handling:** Avoid creating dust. Provide adequate ventilation if dust is created. See section 8 for information on personal protection equipment.

**Conditions for Safe Storage:** Store in a sealed container. Store in a cool, dry area. See section 10 for more information on incompatible materials.

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## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits:	OSHA/PEL	ACGIH/TLV
Iron	No exposure limit established	No exposure limit established
Carbon	15 mg/m <sup>3</sup>	
Manganese	5 mg/m <sup>3</sup>	0.2 mg/m <sup>3</sup>
Phosphorous	0.1 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>
Silicon	5 mg/m <sup>3</sup> (respirable)	5 mg/m <sup>3</sup> (respirable)
Sulfur	13 mg/m <sup>3</sup> (as SO <sub>2</sub> )	0.25 ppm (as SO <sub>2</sub> )
Lead	0.5 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>
Vanadium	0.5 mg/m <sup>3</sup> (as V <sub>2</sub> O <sub>5</sub> )	0.5 mg/m <sup>3</sup> (as V <sub>2</sub> O <sub>5</sub> )
Chromium	1 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>
Petroleum Distillates	5 mg/m <sup>3</sup> (as oil mist)	5 mg/m <sup>3</sup> (as oil mist)
Phosphate	No data	No data
Borax	10 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>
Lime	15 mg/m <sup>3</sup>	
Drawing Lubricant	10 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>

**Engineering Controls:** Ensure adequate ventilation to maintain exposures below occupational limits. Whenever possible the use of local exhaust ventilation or other engineering controls is the preferred method of controlling exposure to airborne dust and fume to meet established occupational exposure limits. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. Do not blow dust off clothing or skin with compressed air.

**Respiratory Protection:** If permissible levels are exceeded, use NIOSH approved dust respirator.

**Eye Protection:** Safety glasses.

**Skin Protection:** Not normally needed. Wear impermeable gloves, protective work clothing as necessary.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance:

Form:	Solid in various forms
Color:	Gray-Black
Odor:	Odorless
Odor Threshold:	Not determined
pH:	N/A
Melting Point:	~2,500°F – 2,650°F
Boiling Point:	No data
Flash Point:	N/A
Evaporation Rate:	N/A
Flammability:	No data
Upper Flammable Limit:	No data
Lower Flammable Limit:	No data
Vapor Pressure:	No data
Vapor Density:	N/A
Specific Gravity:	7.75-8.05 g/cc
Solubility in H <sub>2</sub> O:	Insoluble
Partition Coefficient (n-octanol/water):	Not determined
Autoignition Temperature:	No data
Decomposition Temperature:	No data
Viscosity:	N/A

## 10. STABILITY AND REACTIVITY

Reactivity: No data

Chemical Stability: Stable under recommended storage conditions

Possibility of Hazardous Reactions: No data

Conditions to Avoid: Avoid creating or accumulating fines or dust

Incompatible Materials: Acids

Hazardous Decomposition: Metal oxide fume

## 11. TOXICOLOGICAL INFORMATION

**Likely Routes of Exposure:** Inhalation, skin, eyes. Product as shipped does not present an inhalation hazard; however subsequent operations may create dusts or fumes which could be inhaled.

**Symptoms of Exposure:** Fines/dusts may irritate skin and eyes.

### **Acute and Chronic Effects:**

*Iron:* Irritating to the respiratory tract, iron compounds may cause pulmonary fibrosis if dusts are inhaled.

Inhalation of large amounts may cause iron pneumoconiosis. Chronic inhalation of finely divided powder may cause chronic iron poisoning and pathological deposition of iron in the body tissue. Ingestion may cause vomiting, diarrhea, pink urine, black stool, and liver damage. Iron compounds may cause damage to the kidneys.

*Chromium:* Although much is known about health effects of chromium compounds, the health effects of chromium metal, Cr(0), is not well studied. Due to insolubility most elements in their metallic state are not considered to be serious health hazards.

*Manganese:* Chronic inhalation exposure of humans to high levels of manganese may result in a syndrome called manganism which typically begins with feelings of weakness and lethargy and progresses to the other

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symptoms such as gait disturbances, clumsiness, tremors, speech disturbances, a mask like facial expression and psychological disturbances. Manganese is an essential micronutrient in humans.

*Silicon:* Inhalation or contact with silicon dusts may cause irritation. There is no available data to show any toxic effects of elemental silicon.

**Acute Toxicity:** No data.

**Carcinogenicity:** No data.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** No data.

**Persistence and Degradability:** No data.

**Bioaccumulative Potential:** No data.

**Mobility in Soil:** No data.

**Other Adverse Effects:** No further relevant information available.

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method:**

**Product:** Dispose of in accordance with Federal, State and Local regulations.

**Packaging:** Dispose of in accordance with Federal, State and Local regulations.

## 14. TRANSPORT INFORMATION

**DOT/ADR/IATA/IMDG Regulations:** Not regulated.

**UN Number:** N/A

**UN Proper Shipping Name:** N/A

**Transport Hazard Class:** N/A

**Packing Group:** N/A

**Marine Pollutant:** N/A

**Special Precautions:** N/A

## 15. REGULATORY INFORMATION

**TSCA Listed:** All components are listed.

**Regulation (EC) No 1272/2008 (CLP):** N/A

**Canada WHMIS Classification (CPR, SOR/88-66):** N/A

**HMIS Rating:** Health: 0 Flammability: 0 Reactivity: 0

**NFPA Rating:** Health: 0 Flammability: 0 Reactivity: 0

**Chemical Safety Assessment:** A chemical safety assessment has not been carried out.

## 16. OTHER INFORMATION

The above information is believed to be correct, but does not purport to be all inclusive and shall be used as only a guide. Malin Company shall not be held liable for any damages resulting from handling or from contact with above product.

Prepared By: Malin Co

Revised: May 2015