

**WEBCO INDUSTRIES, INC.**  
**P.O. Box 100**  
**Sand Springs, OK 74063**

**Material Safety Data Sheet**

<b>Site:</b> Webco Industries, Inc. Sand Springs, OK.	<b>Approved MSDS:</b> Date Prepared: 10/13/09 Replaces: 6/28/2004	<b>MSDS No: 1</b>
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**Section 1: Product and Company Identification:**

<b>Product Name:</b> Carbon Steel Tubing, Phosphated	<b>Chemical Name:</b> N/A	<b>Formula:</b> N/A	<b>CAS Number:</b> N/A
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**Product Use: Steel Tubing**

**Supplier Information:**

<b>Supplier Name:</b> Webco Industries, Inc. Sand Springs, OK.	<b>Supplier Phone:</b> 918-241-1000
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**Address:**

201 S. Woodland Dr.  
 Sand Springs, OK. 74063

**Emergency Contact Information:**

Webco Industries, In. 918-241-1000

**Section 2: Composition Information on Ingredients**

<b>Ingredient</b>	<b>CAS No.</b>	<b>% Weight</b>
IRON	1309-37-1	BALANCE
COPPER	7440-50-8	0.50 MAX
CARBON	7440-40-0	0.01-0.50
NICKEL**	7440-02-0	0.25 MAX
MANGANESE**	7439-96-5	0.25-1.5
CHROMIUM**	7440-47-3	0.25 MAX
LEAD**	7439-92-1	<0.01 MAX
PHOSPHORUS	7723-14-0	0.00-0.15
ALUMINUM	7429-90-5	0.00-0.08
SILICON	7440-21-3	0.00-0.50
ZINC	7440-66-6	<0.05

### Section 3: Hazards Overview

#### Emergency Overview:

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO CAUSE CANCER

#### Potential Health Effects:

Steel products in their usual physical form do not pose a health hazard. Inhalation of metal dust and fume may result from further processing of the material by the user, particularly during welding, burning, grinding, and machining activities and should be evaluated by an industrial hygienist.

#### Chronic Health Hazards:

Individuals with chronic diseases or disorders should consult a Physician regarding workplace exposure to ingredients.

The National Toxicology Program NTP and International Agency for Research on Cancer (IARC) consider (1) chromium and certain chromium compounds to be known human carcinogens, (2) nickel and certain nickel compounds to be probable human carcinogens. Mineral Oils are suspect carcinoma of the skin, scrotum, larynx, lung and alimentary-tracts.

#### Medical Conditions Generally Aggravated by Exposure:

##### Aluminum (Al)

Long-term excessive inhalation exposure to Al dusts or fumes has been associated with a fibrotic lung condition known as Shaver's disease; however, the evidence of this is not conclusive since affected workers were exposed to other substances (such as silica) as well. Symptoms of this condition may include shortness of breath, cough, and fatigue.

##### Carbon (C)

Considered to be a nuisance dust. Excessive dust exposure may irritate the eyes and respiratory tract.

##### Chromium (Cr)

Chromium metal and its divalent and trivalent compounds are of low toxicity. Adverse reactions on the skin may include dermatitis for a Cr-sensitive individual. Long-term excessive inhalation exposure to ferrOchromium alloys may cause lung changes in workers exposed to these alloys. Exposure to Chromium metal does not give rise to pulmonary fibrosis or pneumonconiosis.

##### Copper (Cu)

Excessive inhalation exposure to Cu fume may cause irritation of the eyes, nose, and throat and a flu-like illness called metal fume fever. Signs and symptoms of metal fume fever include fever, muscle aches, nausea, chill, dry throat, cough and weakness. Cu fume may also produce a metallic or sweet taste. Long-term excessive exposure to Cu fume may cause discoloration of the skin and hair.

##### Iron (Fe)

Long-term excessive inhalation exposure to iron oxide fumes or dust has been associated with a benign lung condition known as siderosis. No physical impairment of lung function has been linked to siderosis.

##### Lead (Pb)

Acute or long-term excessive inhalation exposures to the fumes or dusts of inorganic lead compounds (such as lead oxide) can adversely affect several organ systems including the nervous system, the digestive system, the blood and blood-forming system and the renal system. Early effects are characterized by fatigue, constipation, muscle aches, abdominal pains, and decreased appetite. Later signs and symptoms can include anemia, pallor, a "lead line" on the gums, and reduce-grip. Severe central nervous system and symptoms effects (referred to as lead encephalopathy) usually only occur after heavy and rapid lead exposures. Signs and symptoms may include headache, dizziness, convulsions, delirium, coma and possibly death. Long-term exposures can also produce

kidney damage.

**Manganese (Mn)**

The dusts and fumes can act as minor irritants to the eyes and respiratory tract. Acute and long-term excessive inhalation exposures to the oxide or salts of Mn may adversely affect the central nervous system (CNS), but symptoms are more likely to occur after at least 1 or 2 years of prolonged or repeated exposures. Early symptoms may include weakness in lower extremities, sleepiness, salivation, nervousness, and apathy. In more advanced stages, severe muscular coordination, impaired speech, spastic walking, mask-like facial expression, and uncontrollable laughter may occur. Excessive inhalation exposure to manganese fumes have also been reported to result in metal fume fever, a flu-like syndrome with symptoms such as dizziness, chills, fever, headache, and nausea. An increased incidence of pneumonia, bronchitis, and inflammation of the lungs has been reported in some worker populations exposed excessively to manganese.

**Nickel (Ni)**

Ni fumes and dusts are respiratory irritants and excessive exposure may cause severe inflammation of the lungs. Prolonged and repeated skin contact with nickel and its compounds may cause an allergic dermatitis. The resulting skin rash is often referred to as "nickel itch". Ni and its compounds may also produce eye irritation, particularly on the inner surfaces of the eyelids. Studies have linked nickel and certain nickel compounds to an increased incidence of cancer of the respiratory system.

**Phosphorus (P)**

The dusts and fumes can act as minor irritants to the eyes, throat, and respiratory tract. Long-term excessive inhalation of phosphorus compounds may lead to cough, bronchitis and pneumonia.

**Silicon (Si)**

This is considered to be nuisance particulate by the American Conference of Governmental Industrial Hygienists (ACGIH)

**Zinc (Zn)**

The inhalation of zinc oxide fumes has been shown to result in a condition known as metal fume fever. The symptoms include fever, chills, muscular pain, nausea and vomiting, but complete recovery occurs in 24 to 48 hours. The same effects are produced by the fumes of some other metals and can also result from breathing finely divided zinc oxide dust.

It is generally agreed that metal fume fever is a temporary condition of brief duration and without after effects and without medical evidence of chronic effects. A limit of 5 mg/m<sup>3</sup> is recommended for zinc oxide fumes. It is believed that if concentrations are kept below this level, the incidence of metal fume fever will be low and any attacks which do occur will be mild.

**Non-Metallic Coatings:**

Prolonged and/or repeated skin contact with lubricants and rust inhibitors may cause dermatitis. In addition, inhalation of excessive concentrations of vapors or gases, e.g. carbon monoxide (from welding, burning, etc.) may result in dizziness, nausea, headaches, and respiratory tract irritation. Mineral Oil- a laxative, inhalation of vapor or particulates can cause aspiration pneumonia.

**Routes of Entry:**

<b>Eyes?</b> Yes	<b>Skin?</b> No	<b>Inhalation?</b> Yes	<b>Ingestion?</b> No
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**Carcinogenicity:**

<b>NTP?</b> Yes	<b>IARC?</b> Yes	<b>OSHA?</b> Yes
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**Section 4: First Aid Measures**

<b>Eye Contact:</b> Treat for foreign body in the eye. Call a physician if condition persists.
<b>Skin Contact:</b> Not anticipated to pose a significant skin hazard. However, should dermatitis develop, was affected area with mild soap and warm water. Call a physician if condition persists.
<b>Inhalation:</b> Remove from excessive exposure levels. Give CPR if breathing has stopped. Get medical attention.
<b>Ingestion:</b> This product is not considered to be an ingestion hazard.

**Section 5: Fire-fighting Measures:**

<b>Flash Point:</b> Mineral Oil Coating 444°F	<b>Auto-Ignition:</b> N/A	<b>LEL:</b> N/A	<b>UEL:</b> N/A
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**NFPA Hazard Classification:**

<b>Health:</b> N/A	<b>Flammable:</b> N/A	<b>Reactivity:</b> N/A
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**HMIS Hazard Classification:**

<b>Health:</b> N/A	<b>Flammable:</b> N/A	<b>Reactivity:</b> N/A
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**Extinguishing Media:**

For Mineral Oil Coating – CO<sub>2</sub>, Foam Dry Chemical

**Special Fire Fighting Procedures:**

STEEL PRODUCTS IN THE SOLID STATE PRESENT NO FIRE OR EXPLOSION HAZARDS.

**Unusual Fire and Explosion Hazards:**

TEMPERATURES ABOVE THE MELTING POINT MAY LIBERATE FUMES OF IRON, NICKEL, ZINC OXIDE and MINERAL OIL.

**Section 6: Accidental Release Measures**

N/A

**Section 7: Handling and Storage**

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### Section 8: Exposure Controls/Personal Protection

Ingredient:	PEL-OSHA	TLV-ACGIH
IRON	10MG/M <sup>3</sup> FeO <sub>2</sub> fume	5 Mg/M <sup>3</sup> FeO <sub>2</sub> fume
COPPER	1 Mg/M <sup>3</sup> Dust, 0.1 MG/M <sup>3</sup> fume	1 Mg/M <sup>3</sup> Dust, 0.2 Mg/M <sup>3</sup> fume
CARBON	N/A	N/A
NICKEL**	1 Mg/M <sup>3</sup> Dust	0.2 Mg/M <sup>3</sup>
MANGANESE**	CEILING 5 Mg/M <sup>3</sup>	0.2 Mg/M <sup>3</sup>
Chromium**	1 Mg/M <sup>3</sup> METAL	0.5 Mg/M <sup>3</sup>
LEAD**	50 MICROGRAMS / M <sup>3</sup>	0.05 Mg/M <sup>3</sup>
PHOSPHORUS	0.1 Mg/M <sup>3</sup>	0.02 ppm
ALUMINUM	15 Mg/M <sup>3</sup> TOTAL, 5 RESP. DUST	10 Mg/M <sup>3</sup>
SILICON	15 Mg/M <sup>3</sup> TOTAL, 5 RESP. DUST	10 Mg/M <sup>3</sup>
ZINC	5 Mg/M <sup>3</sup> FUME	5 Mg/M <sup>3</sup> FUME

#### Health Hazard Information:

OIL COATINGS MAY BE USED

\*\*DESIGNATED TOXIC CHEMICALS CONTAINED IN THIS PRODUCT ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW ACT OF 1986 (40CFR372).

#### Respiratory Protection:

When engineering controls are not feasible or sufficient to lower PEL, use of a NIOSH/MSHA approved dust and fume respirator should be used to avoid excessive inhalation of particulate, should particulate levels be above the stated Permissible Exposure Limit (PEL).

#### Ventilation:

Ventilation should be sufficient to maintain exposure below the applicable limits.

#### Protective equipment:

Protective Gloves: Should be worn as required for welding, burning or handling operations.

#### Eye Protection:

Safety glasses or goggles as needed for welding, burning, grinding or machine operations.

#### Other Clothing and Equipment:

Flame/heat protective garments required for safe burning, welding, or grinding.

#### Personal Sampling Procedure:

N/A

#### Special Precautions:

N/A

### Section 9: Physical and Chemical Properties

Appearance and Odor: GRAY TO SILVER / NO ODOR

Boiling Point: N/A

Melting Point: 2750°F

Solubility in Water (% by weight): N/A

Evaporation Rate: N/A

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

PH: N/A

% Volatiles by Volume (at 20°C): N/A

### Section 10: Stability and Reactivity

<b>Stability:</b> Stable	<b>Avoid:</b> Stable under normal conditions of use, storage & transport
<b>Incompatibility:</b> N/A	
<b>Hazardous Decomposition of By-Products:</b> Mineral Oil Fume	
<b>Polymerization:</b> Will not occur	<b>Avoid:</b> Will react with strong acid to liberate hydrogen.

### Section 11: Toxicological Information

Chemical Name	% Wt.	LD50	LC50

<b>Other Studies:</b> N/A
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### Section 12: Ecological Information

<b>Exotoxicity:</b> N/A
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<b>Environmental Fate:</b> N/A
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### Section 13: Disposal Considerations

<b>SPILLS AND DISPOSAL PROCEDURES:</b> Spills: Not applicable to steel in the solid state  Waste Disposal Method: Metals may be reclaimed. Dispose of in a landfill in accordance with all local, state, and federal regulations.
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### Section 14: Transport Information

<b>International</b>
<b>United States</b>
<b>Canada</b>
<b>European Community</b>

### Section 15: Regulatory Information

#### US Federal Regulations

TSCA
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**SARA 311 and 312 Hazard Categories:**

<b>Immediate (Acute) Health Hazard:</b>	No
<b>Delayed (Chronic) Health Hazard:</b>	No
<b>Fire Hazard:</b>	No
<b>Reactivity:</b>	No
<b>Sudden Release of Pressure:</b>	No

<b>SARA Section 313 Notification:</b> Yes
<b>Ozone Depleting Substances:</b> N/A
<b>Volatile Organic Compounds (VOC):</b> N/A
<b>US State Regulation:</b> N/A
<b>Canadian Regulation:</b> N/A
<b>European Regulation:</b> N/A
<b>Other Regulation:</b> N/A
<b>MITI:</b>

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**Reason for Change:**

Revision:	Sec/Para Changed	Change Made:	Date:
2	N/A	Updated for review & date	10/13/09

**Approvals:****First Approver's signature**

<b>Name:</b> Robert Field <b>Title:</b> Safety/Risk Manager	
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**Second Approver's Signature**

<b>Name:</b> Marie K. Martin <b>Title:</b> Manager/ Environmental & Quality Systems	
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