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

Material Safety Data Sheet

Site:	**Site:**	**Approved MSDS:**	**MSDS No:**
Webco Industries, Inc. 3116 E. 31st Street North Tulsa, OK	Webco Industries, Inc. 750 N. Martin Luther King Orange, TX 77630	Date Prepared: 1/18/2012	

Section I: Product and Company Identification:

Product Name:	**Chemical Name:**	**Formula:**	**CAS Number:**
Copper/Copper Alloy Tubing	N/A	N/A	N/A

Product Use: Copper / Copper Alloy Tubing

Supplier Information:

Supplier Name:	**Supplier Phone:**
Webco Industries, Inc. 9101 W. 21st Street Sand Springs, OK.	918-241-1000

Emergency Contact Information:

Webco Industries, Inc. 918-241-1000

Section II: Hazardous Ingredients

Ingredient:		**PEL-OSHA**	**TLV-ACGIH**
IRON	1309-37-1	10mg/m^3 FeO_2 fume	5 mg/m^3 FeO_2 fume
NICKEL **	7440-02-0	1 mg/m^3 metal and insoluble compounds	1.5 mg/m^3, metal
LEAD **	7439-92-1	0.05 mg/m^3	0.15 mg/m^3
ZINC **	1314-13-2	10 mg/m^3 Dust	10 mg/m^3 Dust
COPPER **	7440-50-8	1 mg/m^3 Dust 0.1 mg/m^3 fume	1 mg/m^3 Dust 0.2 mg/m^3 fume
MANGANESE **	7439-96-5	5 mg/m^3 Dust	5 mg/m^3 Dust 1 mg/m^3 fume
TIN	7440-31-5	2 mg/m^3	2 mg/m^3
PHOSPHORUS	7723-14-0	0.1 mg/m^3	0.1 mg/m^3
ALUMINUM **	7429-90-5	15 mg/m^3 TOTAL, 5 mg/m^3 RESP. DUST	10 mg/m^3
ARSENIC **	7440-38-2	0.5 mg/m^3	0.02 mg/m^3

Section III: Composition/Information on Ingredients

Alloy UNS No.	Copper % 7440-50-8	Tin % 7440-31-5	Nickel % 7440-02-0	Lead % 7439-92-1	Iron % 1309-37-1	Zinc % 1314-13-2	Phosphorus % 7723-14-0	Manganese % 7439-96-5	Arsenic % 7440-38-2
C12200	99.9 Min	-	-	-	-	-	0.015-0.040	-	-
C44300	70 – 73	0.9 – 1.2	-	0.07 Max	0.06 Max	Balance	-	-	0.02-0.06
C70600	Balance	-	9. – 11.	0.05 Max	1.0 – 1.8	1.0 Max	-	1.0 Max	-
C71500	Balance	-	29 – 33	0.05 Max	0.4 – 1.0	1.0 Max	-	1.0 Max	-
Alloy UNS No.	Copper % 7440-50-8	Tin % 7440-31-5	Nickel % 7440-02-0	Lead % 7439-92-1	Iron % 1309-37-1	Zinc % 1314-13-2	Phosphorus % 7723-14-0	Aluminum % 7429-90-5	Arsenic % 7440-38-2
C68700	76 – 79	-	-	0.07 Max	0.06 Max	Balance	-	1.8 – 2.5	0.02 –0.10

Section IV: First-Aid Measures

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

Section V: Fire-fighting Measures

Flash Point:	Auto-Ignition:	LEL:	UEL:
N/A	N/A	N/A	N/A

NFPA Hazard Classification:

Health:	Flammable:	Reactivity:
N/A	N/A	1

HMIS Hazard Classification:

Health:	Flammable:	Reactivity:
N/A	N/A	0

Special Fire Fighting Procedures:
METAL 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. Molten metal may react violently with water.

Section VI: Accidental Release Measures

N/A

Section VII: Handling and Storage

WEBCO INDUSTRIES, INC. DISCLAIMS ANY RESPONSIBILITY FOR HARM TO PERSONS OR PROPERTY RESULTING FROM CONDITIONS ARISING FROM STORAGE OR HANDLING OF THIS MATERIAL OR ARTICLE BY INDIVIDUALS BEYOND THE CONTROL OF WEBCO INDUSTRIES, INC. OR RESULTING FROM USE OF THE MATERIAL OR ARTICLE IN A MANNER INCONSISTENT WITH ITS NORMAL COMMERCIAL USE.

WEBCO INDUSTRIES, INC. PROVIDES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, AND ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE DATA CONTAINED HEREIN.

Section VIII: Exposure Controls/Personal Protection

Health Hazard Information: **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

Hazards Overview

Emergency Overview: WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO CAUSE CANCER
Potential Health Effects: Metal 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.
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.

Arsenic (As)
Very hazardous in case of ingestion or of inhalation. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant). The substance is toxic to kidneys, lungs, the nervous system, mucous membranes. Repeated or prolonged exposure to the substance can produce target organ damage.

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)
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 reduced 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 Manganese 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". Nickel 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.

Tin (Sn)
Generally not hazardous in normal handling. Avoid long term exposure to skin or by inhalation. Effects of overexposure, Acute and Chronic: No effects expected to skin. May cause mechanical abrasion to eyes. Prolonged inhalation of dust or fume may result in a benign pneumoconiosis, producing distinctive changes in the lungs with no apparent disability or

complications. Conditions aggravated / target organs: persons with pre-existing eye, skin or respiratory conditions may be more susceptible.

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 can 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^3 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.

Section IX: Physical and Chemical Properties

Appearance and Odor: SILVER or YELLOW to RED / NO ODOR
Boiling Point: N/A
Melting Point: 1290 – 2260 °F
Solubility in Water (% by weight): N/A
Evaporation Rate: N/A
Specific Gravity (H2O = 1): 7 - 9
PH: N/A
% Volatiles by Volume (at 20°C): N/A

Section X: Stability and Reactivity

Stability: Stable	**Avoid:** Stable under normal conditions of use, storage & transport. Molten metal may react violently with water
Incompatibility: N/A	
Hazardous Decomposition of By-Products: Metal Fume	
Polymerization: Will not occur	**Avoid:** Acids, Bases and Oxidizers

Section XI: Disposal Considerations

SPILLS AND DISPOSAL PROCEDURES:
Spills:
Not applicable to metal 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.

Section XII: Regulatory Information

US Federal Regulations

SARA 311 and 312 Hazard Categories:

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

Superfund Amendments and Reauthorization Act of 1986 (SARA), Title III
SECTION 311/312 HAZARD CATEGORIES: Immediate Health Effect, Delayed Health Effect
This product contains the following EPCRA Section 313 chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right – To – Know Act of 1986 (40 CFR 372):

SECTION 313 REPORTABLE INGREDIENTS:

Chemical Name	CAS Number	Concentration (% by weight)	Reportable
Aluminum	7429-90-5	1.8 – 2.5	Yes - 1.0% (fume or dust)
Arsenic	7440-38-2	0.02 – 0.10	Yes - if 0.1%
Copper	7440-50-8	0-21.0 (Nickel based alloys)	Yes- Greater than 1.0%
Lead	7439-92-1	0.07 Max	No – Less than 0.1%
Manganese	7439-96-5	1.0 Max	Yes – if 1%
Nickel	7440-02-0	0.4 – 1.8	Yes – Greater than 0.1%
Zinc	1314-13-2	19.0 – 29	Yes – Greater than 1.0% (fume or dust)

Document Author:	**Document Manager:**
Robert Field	Patti Jordan

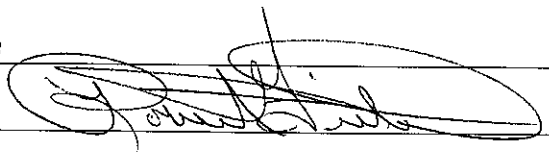
Reason for Change:

Revision:	Sec/Para Changed	Change Made:	Date:

Approvals:

First Approver's signature

Name: Robert Field
Title: Safety / Risk Manager



Second Approver's Signature

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