

# Conduit Pipe Products Company

## G H S Safety Data Sheet

### I. PRODUCT AND COMPANY IDENTIFICATION

**Company**

Conduit Pipe Products Company  
1501 W. Main Street  
West Jefferson, OH 43162

**Product Name**

Conduit Pipe Fittings

**Product Class**

Fabricated Metal

**Issue Date**

May 2015

**Emergency Phone Number**

614 879 9114

### II. HAZARDS IDENTIFICATION

**Health-** Respiratory Irritant (Dust/Fume)

**Physical** – None

**Environmental-** None known

Pipe Fittings pose no health concern in their normal state.

The health effects and symptoms listed below would result primarily through exposure to or inhalation of dust or fumes. Ingestion is highly improbable. Absorption through the skin is almost impossible. Any cuts should be cleaned and a physician contacted to determine the need for any further treatment.

**Aluminum (AL)-** Aluminum dust/fines are a low health risk by inhalation and should be treated as a nuisance dust. Aluminum dust is a respiratory and eye irritant.

**Carbon (C )-** Chronic inhalations of high concentrations of carbon may cause pulmonary disorders

**Chromium (Cr)-** The toxicity and health hazards of chromium are dependent upon its oxidation state. The forms found in metal are of very low toxicity. The hexavalent form that occurs in chromates and chromic acid is very toxic and can produce both acute and chronic effects. Respiratory symptoms may include coughing, wheezing, shortness of breath and nasal itch. Eye irritation or inflammation can also be produced. Exposure to some hexavalent chromium compounds have been shown to be associated with an increased risk of lung cancer.

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

**Manganese (Mn)-** Elemental Mn exhibits very low toxicity. The dust or fumes can act as minor irritants to the eyes and respiratory tract. Both acute and chronic exposures may adversely affect the central nervous system but symptoms are more likely to occur after at least one or two years of prolonged or repeated exposures. Symptoms may include sleepiness, weakness, emotional disturbances, spastic gait, mask-line facial expression and paralysis. Animal studies indicate that manganese exposure may increase susceptibility to bacterial and viral infections.

**Molybdenum (Mo)-** Certain handling operations, such as burning or welding, may generate both insoluble molybdenum compounds (metal and molybdenum dioxide) and soluble molybdenum compounds (molybdenum trioxide). Molybdenum

compounds generally exhibit a low order of toxicity with the trioxide the more toxic. Some reports indicate that the dust of the molybdenum metal, molybdenum dioxide and molybdenum trioxide may cause eye, skin, nose and throat irritation in animals.

**Nickel (Ni)**- Ni fumes and dust are respiratory irritants and may cause a severe pneumonitis. Skin contact with nickel and its compounds may cause an allergic dermatitis. Studies have linked nickel and certain nickel compounds to an increased incidence of cancer of the lungs and nasal passages.

**Silicon (Si)**-This is considered to be a nuisance particulate by the ACGIH.

**Zinc (Zn)**- Subjecting zinc or alloys containing zinc to high temperatures (such as would occur during welding) will cause the formation of zinc oxides. Exposure to zinc oxide fumes or dust can result in a flu-like illness called metal fume fever. Early symptoms may include a sweet or metallic taste in the mouth, dryness or irritation of the throat and coughing. These symptoms may progress to shortness of breath, headache, fever, chills, muscle aches, nausea, vomiting, weakness, fatigue and profuse sweating. The symptoms may last up to 48 hours and are more likely to occur after a period away from the job.

### III. COMPOSITION AND INFORMATION ON INGREDIENTS

<u>Material or Component</u>	<u>CAS Number</u>	<u>% Weight</u>	<u>Exposure Limits</u>	
Base Metal (Steel)			OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)
Iron (Fe)	7439-89-6	Balance	10 (Fe2O3 Fume)	5.0 (Fe2O3 Fume)
Alloying Elements				
Carbon (C)	7440-44-0	0 – 1.03	None Listed	None Listed
Chromium (Cr)	7440-47-3	0- 1.2	1.0 as chrome	0.5 as chrome
Manganese (Mn)	7439-96-5	0- 2.5	5 as manganese	5 as dust; 1 as fume
Molybdenum (Mo)	7439-98-7	0-1.0	15 as insoluble compounds	10 as insoluble compounds
Nickel (Ni)	7440-02-0	0-2.1	1.0 as Nickel	1.0 as Nickel
Phosphorous (P)	7723-14-0	0-.04	0.1 as Phosphorous	0.1 as Phosphorous
Silicon (SI)	7440-21-3	0- 1.6	None Listed	10 total dust
Sulfur (S)	7704-34-9	0- .5	13 sulfur dioxide	5 sulfur dioxide
Zinc (Zn) coating	1314-13-2	10.002 Max	15 as fume	5.0 as fume
Base Metal (Aluminum)				
Aluminum as Metal	7429-90-5	>90	15 as total dust	10 as metal dust
Alloying elements	Zinc, manganese and silicon- (limits above and below)			
Zinc	1314-13-2	0- 6	5 as dust- zinc oxide	5 as fume
			15 as fume	5 as fume

Note: Various grades of steel will contain different combinations of these elements. Trace elements may also be present in minute amounts. Fittings may be galvanized, the elements of which are included in the ingredients.

### IV. EMERGENCY FIRST AID PROCEDURES

- Inhalation:** Remove to fresh air; if condition continues, consult physician.
- Eye Contact:** Immediately flush well with running water to remove particulate; get medical attention.
- Skin Contact:** If irritation develops, remove clothing and wash well with soap and water. If condition persists, seek medical attention.
- Ingestion:** If significant amounts of metal are ingested, seek medical attention.

### V. FIRE-FIGHTING MEASURES

**Flash Point-** N/A

**Auto Ignition Temperature**-N/A  
**Flammable Limits in Air**-N/A  
**Extinguishing Media**- N/A  
**Fire and Explosion Hazards**- None  
**Extinguishing Media Not to be Used**- N/A

## **VI. ACCIDENTAL RELEASE MEASURES**

No special precautions are necessary for spills of material. If large quantities of dust are spilled, remove by vacuuming to prevent large concentrations of airborne dust. Cleanup personnel should wear respirators when dust is involved. Dispose of material in accordance with local, state, and federal regulations.

## **VII. HANDLING AND STORAGE**

No special precautions are needed.

## **VIII. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

Steel products in the natural state do not present air inhalation, ingestion, or contact health hazards. However, operations such as welding, burning, sawing, brazing, grinding, and other processes which elevate the temperature of the product to or above its melting point or result in the generation of airborne particulates may present hazards. These operations should be performed in well-ventilated areas. The major exposure hazard is inhalation.

### **Respiratory Protection**

NIOSH approved dust/mist/fume respirator should be used during welding or burning if OSHA PEL or TLV is exceeded.

### **Eyes and Face**

Safety glasses should always be worn when grinding or cutting; face shields should be worn when welding or burning.

### **Hands, Arms, Body**

Use appropriate protective clothing such as welder's aprons & gloves when welding or burning. Check local codes.

### **Other Clothing and Equipment**

As required.

## **IX. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance and Odor**- Gray/black solid articles, metallic lustre, odorless

**Acidity/Alkalinity**- NA

**Melting Point**-Approx 2750 deg F

**Specific Gravity** (H<sub>2</sub>O = 1) – 7

**Vapor Pressure**-NA

**Boiling Point**-NA

**Solubility in water** (% by weight) – NA

## **X. STABILITY AND REACTIVITY**

**Stability**- stable

**Incompatibility (Materials to Avoid)** - Reacts with strong acids to form hydrogen gas.

**Conditions to Avoid**- Non-ventilated areas when cutting, welding, burning, or brazing; avoid generation of airborne dusts and fumes

**Hazardous Decomposition Products**- Metallic oxides

## **XI. TOXICOLOGY INFORMATION**

**Acute:** Excessive inhalation of metallic fumes and dusts may result in irritation of eyes, nose, and throat. Refer to Section II.  
**Chronic:** Chronic and prolonged inhalation of high concentrations of fumes or dust of the following elements may lead to the conditions listed opposite the element (refer to Section II).  
**Occupational Exposure Limits-** Refer to Section III.

## **XII. ECOLOGICAL INFORMATION**

**Ecotoxicity-** None Known

## **XIII. WASTE DISPOSAL CONSIDERATION**

Follow all local, state, and federal regulations.

## **XIV. TRANSPORTATION INFORMATION**

No recommendation.

## **XV. REGULATORY INFORMATION**

Not applicable.

## **XVI. OTHER INFORMATION**

Pipe fittings may have surface coatings, as noted in Section III.