

1. Identification & Company Identification

Trade Names:

Carbon Steel Wire, PC Strand,
and Welded Wire Reinforcement

Product Description:

Welded Wire, Steel Wire Frame, Gray in color

Company:

Western States Wholesale
1420 S. Bon View, Ontario, CA 91761

Emergency phone:

(800) 325-6851

Recommended Use:

Primarily concrete reinforcement; other applications may also apply.

Restrictions on Use

N/A

* The "Recommended use" identified for this product is provided solely to comply with a US Federal requirement and is not part of Western States Wholesale. published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in Western States Wholesale. Sales Agreement.

2. Hazard(s) Identification

Carcinogenicity:

Under normal handling and use, exposure to steel wire, welded wire reinforcement or PC strand presents few health hazards. Thermal cutting and welding may produce fumes or dust which could be inhaled and be potentially hazardous. The exposure levels in Section 3 and hazard statements in section 2 b) relate to acute fume and dust exposure.

Note:

Note: the following hazard statements may apply to acute fume/dust exposure:

H317: May cause an allergic skin reaction.

H351: Suspected of causing cancer via inhalation.

H372: Causes damage to respiratory tract through prolonged or repeated exposure

Note: the following precautionary statements may apply to acute fume/dust exposure:

P202: Do not handle until all safety precautions have been read and understood.

P261: Avoid breathing dust/fumes.

P281: Use personal protective equipment as required.

P308 + P313: If exposed or concerned get medical advice/attention.

3. Composition/Information on Ingredients

Components	CAS #	Percent	TLV	OSHA PEL	Levels Referring To
Iron	1309-37-1	93 – 99	5 Mg/m ³ (RESPIRABLE)	10 Mg/m ³	As dust or welding fumes
Manganese	7439-96-5	0 – 2.5	5 Mg/m ³	5 Mg/m ³	As total dust
Silicon	7440-21-3	0 – 1.5	10 Mg/m ³	10 Mg/m ³	As total dust
Chromium	7440-47-3	0 – 1.0	0.5 Mg/m ³	1 Mg/m ³	As chromium metal (Cr)
Molybdenum	7439-98-7	0 – 1.0	5 Mg/m ³	5 Mg/m ³	As soluble Mo
Carbon	7440-44-0	0 – 1.0	3.5 Mg/m ³ (as carbon black)	15 Mg/m ³	As graphite

4. First-Aid Measures

Description of necessary measures

Eye Contact - Flush thoroughly with running water to remove particulate.

Skin Contact - Brush off excess dust and wash area thoroughly with soap and water.

Inhalation - Remove to fresh air.

Ingestion - Seek medical attention.

Significant symptoms/effects, acute and delayed.

Eye Contact

Dust, particulates, or fumes may cause irritation including pain and redness. Rubbing of the eye may result in scratching of the cornea. Contact with heated material may cause thermal burns.

Skin Contact

Dust or particulates may cause mechanical irritation due to abrasion. Some components in this product are capable of causing an allergic reaction, possibly resulting in burning, itching, and skin eruptions. Contact with heated material may cause thermal burns.

Inhalation

Dust may cause irritation of the nose, throat, and lungs. Excessive inhalation of metallic fumes and dust may result in metal fume fever, an influenza-like illness characterized by a sweet or metallic taste in the mouth accompanied by dryness and irritation of the throat, cough, shortness of breath, pulmonary edema, general malaise, weakness, fatigue, muscle and joint pains, blurred vision, fever, and chills. Typical symptoms last from 12 to 48 hours.

Ingestion

Not expected to be acutely toxic via ingestion based on the physical and chemical properties of the product. Swallowing excessive amounts of dust may cause irritation, nausea, and diarrhea.

Chronic or Special Toxic Effects

Repeated exposure to fine dust may inflame the nasal mucosa and cause changes to the lung. In addition, a red-brown pigmentation of the eye and/or skin may occur. Welding fumes have been associated with adverse health effects. Product contains suspected carcinogens.

Target Organs

Overexposure to dust or fumes may cause adverse effects to the following organs or systems: eyes, skin, liver, kidney, central nervous system, cardiovascular system, respiratory system.

Medical Conditions Aggravated by Exposure

Exposure may aggravate skin diseases such as eczema or respiratory disorders including asthma, bronchitis, and emphysema. Long-term inhalation exposure to agents that cause pneumoconiosis (e.g. dust) may act synergistically with inhalation of oxide fumes/dust from this product.

Indication of immediate medical attention and special treatment needed, if necessary.

Note to Physician- Inhalation of metal fume or metal oxides may produce an acute febrile state, with cough, chills, weakness, and general malaise, nausea, vomiting, muscle cramps, and remarkable leukocytosis.

Treatment is symptomatic, and condition is self-limited in 24-48 hours. Chronic exposure to fumes/dust may result in pneumoconiosis of mixed type.

5. Fire-Fighting Measures

Product is not considered flammable or combustible.

Flash Point (°F):

N/A

Fire Extinguishing Media:

N/A

Flammable Limits (Vapor in Air, Vol. %):

N/A

Unusual Fire & Explosion Hazards:

None

6. Accidental Release Measures

Precautions if Material is Spilled or Released

Emergency response is unlikely unless in the form of combustible dust. Avoid inhalation, eye, or skin contact of dusts by using appropriate precautions outlined in section 8. Keep fine dust or powder away from sources of ignition. Heavy concentrations of airborne dust may be minimized by vacuuming or wet-sweeping dusty areas. Clean-up personnel should wear respirators and protective clothing.

Fire and Explosion Hazards

Some customer processes may generate combustible dust that may require specific precautions when cleaning spills or releases of dust.

Environmental Precautions

Prevent dust or particulates from entering drains, sewers, or waterways. Some grades of steel may contain reportable quantities of alloying elements. See Section 15 for additional information.

Waste Disposal Methods

Dispose used or unused product in accordance with applicable Federal, State, and Local regulations.

7. Handling and Storage

Storage:

Store in a dry area.

Handling

No special measures necessary provided product is used correctly. Keep out of reach of children.

8. Exposure Controls/personal Protection

Eye Protection

Safety glasses, eyewash stations

Skin Protection

Protecting clothing including footwear

Respiratory Protection (Specific Type)

MSHA or NIOSH approved respirators

Ventilation Recommended

Use exhaust ventilation

Other Protection - No food consumption in area of concentrations of dust or vapor.

9. Physical and Chemical Properties

Appearance (physical state, color etc.): grey or black solid metallic wire; slight oxide coloration (i.e. blue) possible on PC strand;

Odor: (N/A)

Melting point/freezing point: (MP: ~2700 – 2800 degrees F)

Flash point: (N/A)

Evaporation rate: (N/A)

Flammability (solid, gas): (N/A in bulk form); see sections 5 and 6 for flammability of dust or powder

Upper/lower flammability or explosive limits: (N/A)

Vapor pressure: (N/A)

Solubility(ies): not soluble in water, oil, or alcohol-based reagents

Auto-ignition temperature: (N/A)

10. Stability and Reactivity

Stability

Chemically stable

Reactivity/Incompatibility

Strong acids or caustics may produce H₂ gas; do not store near strong oxidizers

Hazardous Decomposition Products

Welding, cutting or grinding may cause metal fumes or dust (see section 4).

Keep fine dust or powder away from sources of ignition.

11. Toxicological Information

Under normal handling and use, exposure to steel wire, welded wire mesh or PC strand presents few health hazards. Thermal cutting and welding may produce fumes which could be inhaled and be potentially hazardous. The exposure levels in Section 3 relate to fumes and dust. Chronic overexposure to iron oxide fumes may cause benign pneumoconiosis with symptoms that include chronic bronchitis, emphysema, and shortness of breath upon exertion. Overexposure to dusts and metal fumes from the ferrous alloy elements may cause irritation to the skin, nose, mouth and eyes and lung and affect the gastrointestinal, nervous, and hemotopoietic systems. Chronic health effects (including cancer) have been associated with the welding fumes of individual component metals. Fumes of manganese may cause metal fume fever with flu-like symptoms. Prolonged exposure to manganese dust or fumes may lead to "manganism", a neurological syndrome with symptoms including tremors, reduced response speed, irritability, and gait and balance difficulties.

Chromium has been identified as potential human carcinogen. Cancer is generally attributed to the hexavalent (+6) form of chromium which is listed as a carcinogen by NTP and IARC (Group 1). In addition, prolonged and repeated overexposure to chromium dusts or fumes may cause skin ulcers, nasal irritation and ulceration, kidney damage and cancer of the respiratory system. Chromium is a skin sensitizer. This product may contain small amounts of nickel. Prolonged and repeated contact with nickel may cause sensitization dermatitis. Inhalation of nickel compounds has caused lung damage as well as sinus, nasal and lung cancer in laboratory animals. Nickel is a listed carcinogen by NTP and IARC (Group 1). This product may contain small amounts of vanadium. Adverse effects from dermal, inhalation or parenteral exposure to various vanadium compounds have been reported. The major target for vanadium pentoxide toxicity is the respiratory tract. Fumes or dust can cause severe eye and respiratory irritation, and systemic effects. Following overexposure, reported symptoms include chronic bronchitis, green tongue, conjunctivitis, chronic productive cough, and tightness of the chest have been reported following overexposure. Allergic reactions resulting from skin and inhalation exposures have also been reported. Vanadium currently is not regarded as a human carcinogen.

The product may contain small amounts of copper. Copper dust and fumes can irritate the eyes, nose and throat causing coughing, wheezing, nosebleeds, ulcers and metal fume fever. Other effects from repeated copper fume inhalation include discoloration of skin, teeth or hair. Copper also may cause an allergic skin reaction. Overexposure to copper can affect the liver.

12. Ecological Information

No data available. None of the ingredients are classified as a Marine Pollutant.

13. Disposal Considerations

Dispose in accordance with federal, state, and local health/environmental regulations. Prevent materials from entering drains, sewers, or waterways. Recycling is encouraged.

14. Transport Information

DOT Shipping Name: Non-Hazardous for Transport
DOT Hazard Class: Not Regulated
UN/NA ID No.: None
UN TDG Class: Not Regulated
Hazard Id No. (HIN): None

IMDG Hazard Class: Not Regulated
IATA Hazard Class: Not Regulated
RID/ADR Code: Not Regulated
Label: None Required
Hazard Symbols: None

15. Regulatory Information

OSHA Regulations:

This product is not hazardous under the criteria of the Federal OSHA Hazardous Communication Standard 29 CFR 1910.1200. However, dust and fumes from this product may be combustible or hazardous and require protection to comply with applicable Federal, State and local laws and regulations.

EPA Regulations:

RCRA: Chromium is regulated under this act.

Clean Water Act: Chromium is a Section 307 Priority Pollutant

Safe Drinking Water Act: Chromium, Iron, Manganese and Molybdenum are regulated under this act.

Toxic Substance Control Act (TSCA): Components of this product are listed on the TSCA Inventory

CERCLA Hazardous Substance (40 CFR 302.4): This product as a whole is not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA), Title III

Section 311/312: Immediate (acute) health hazard and delayed (chronic) health hazard

This product contains EPCRA Section 313 chemicals subject to the reporting requirements of the Emergency Planning and Community Right-To-Know Act of 1986.

State Regulations:

California Proposition 65: This product may contain chemicals known to the State of California to cause cancer and chemicals known to cause birth defects or other reproductive harm.

This product may contain components subject to Massachusetts; Pennsylvania and New Jersey substance lists.

Other Regulations: The product as a whole is not listed in any state regulations. However, individual components of

the product are listed in various state regulations:

WHMIS (Canadian): D2B Product Classification

16. Other Information

HMIS Hazard Ratings:

Hazard Rating System:

NFPA Code: 0-0-0

HMIS Code: 0-0-0

PPE: See Section 8

Notes

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