

Material Safety Data Sheet



Date of last revision 2/18/2013

I. General Information

- **Chemical Name & Synonyms** – Iron
- **Chemical Family** - Steel
- **Proper DOT Shipping Name** – Bright Wire (Smooth, Deformed or Ribbed), Welded Wire Mesh or PC Strand

Mill Locations and 24 Hour Contacts

Insteel Wire Products - AZ
4750 Olympic Way
Kingman, Arizona 86402
928-692-1001

Insteel Wire Products – FLJ
3050 Melson Avenue
Jacksonville, Florida 32254
904-354-8552

Insteel Wire Products - FLS
1 Wiremil Road
Sanderson, Florida 32087
904-275-2100

Insteel Wire Products – KY
3325 State Road 1099
Hickman, Kentucky 42050
270-236-2325

Insteel Wire Products - MO
810 Atchison Street
St. Joseph, Missouri 64503
816-233-1177

Insteel Wire Products - NC
1510 Carter Street
Mount Airy, NC 27030
336-719-9000

Insteel Wire Products - PA
501 Forest Drive
Hazle Township, PA 18202
570-450-2090

Insteel Wire Products - TN
630 National Drive
Gallatin, Tennessee 37066
615-451-6330

Insteel Wire Products - TX
500 Klemp Road
Dayton, Texas 77535
936-258-7625

II. Ingredients

Principal Hazardous Components	CAS #	Percent	TLV	OSHA PEL
Iron	1309-37-1	93 – 99	5 Mg/M ³	10 Mg/M ³
Manganese	7439-96-5	0 - 2.5	5 Mg/M ³	5 Mg/M ³
Silicone	7440-21-3	0 - 1.5	10 Mg/M ³	10 Mg/M ³
Chromium	7440-47-3	0 - 1.0	5 Mg/M ³	10 Mg/M ³
Molybdenum	7439-98-7	0 - 1.0	5 Mg/M ³	5 Mg/M ³
Carbon	7440-44-0	0 - 1.0	3.5 Mg/M ³	None listed

No other elements or compounds exceed 1%.

III. Physical Data

Boiling Point - N/A

Vapor Pressure - N/A

Vapor Density - N/A

Solubility in Water - N/A

Appearance - Gray or Black

Specific Gravity (H₂O = 1) - 7.8

Percent Volatile by Volume - N/A

Evaporation Rate - N/A

pH - N/A

Odor - None

IV. Fire and Explosion Hazard Data

- Flash Point (Test Method) - N/A
- Auto Ignition Temperature - N/A
- Flammable Limits: LEL - N/A UEL - N/A
- No fire or explosion hazard - non-combustible.

V. Health Hazard Data

Symptoms of Exposure

Under normal handling and use, exposure to the steel wire, welded wire mesh or PC strand in massive form presents few health hazards. Thermal cutting and welding may produce fumes which could be inhaled and be potentially hazardous. The exposure levels in Section II relate to fumes and dusts.

Chronic overexposure to iron oxide fumes may cause benign pneumoconiosis with few symptoms. Overexposure to dusts and metal fumes from the ferrous alloy elements may cause irritation to the skin, nose, mouth and eyes and lung changes leading to pulmonary diseases.

Fumes of manganese may cause metal fume fever with flu-like symptoms. Early symptoms of manganese poisoning from inhalation of the fumes include headache, apathy, sleepiness and weakness or cramps in the legs. Chronic overexposure can affect the central nervous system, ultimately leading to emotional disturbances, gait and balance difficulties and paralysis.

Chromium has been identified as potential human carcinogens.

Emergency First Aid

- Eye Contact - flush well with running water to remove particulate.
- Skin Contact - Brush off excess dust and wash area well with soap and water.
- Inhalation - Remove to fresh air.
- Ingestion - Get medical attention in the unlikely event that large quantities have been ingested.

VI. Reactivity Data

- Stability - Stable
- Incompatibility - Strong acids or caustics may produce H₂ gas
- Hazardous Decomposition Products - Welding, cutting or grinding may cause metal fume or noxious gases.

VII. Environmental Protection Procedures

- Spill Response
No special precautions are required. Heavy concentrations of airborne dust may be minimized by vacuuming or wet-sweeping dusty areas. Clean-up personnel should wear respirators and protective clothing.
- Waste Disposal Method
Dispose in accordance with all Federal, State and Local Regulations.

VII. Special Protection Information

- 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.

IX. Special Precautions

- Hygienic Practices in Handling & Storage
Exercise care during grinding, welding and cutting operations to minimize airborne particles and fumes. Use good housekeeping practices to prevent accumulations of dust. Avoid breathing dust or fumes w/out respirators.
- Other Information
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