



Safety Data Sheet

Conforms to the requirements of OSHA Standard 1910.1200 *Hazard Communication* and to the Various State *Employee Right to Know Law*.

1. Identification

1.1 Product Identifier Steel Pipe

1.2 Recommended use and restrictions on use Merchant Couplings, Pipe Nipples

1.3 Manufacturers details WARD MAUFACTURING LLC

Address: 117 Gulick St./P.O. Box 9
Blossburg, PA 16912
Telephone: (570) 638-2131
Fax: (570) 241-0100
Website: www.wardmfg.com

1.4 Emergency telephone number (570) 638-2131

2. Hazard Identification

There are no health hazards from these parts in solid form. Dust and fumes from welding, grinding, machining, etc. may cause health hazards.

Potential Hazard	Hazard Category	Hazard symbol	Signal Word	Hazard Statement
Acute Toxicity Hazard	4	Exclamation Mark	Warning	Harmful if swallowed
Skin Irritation	2	Exclamation Mark	Warning	Causes skin irritation
Eye Damage/Irritation	2A	Exclamation Mark	Warning	Causes serious eye irritation
Skin Sensitization	1	Exclamation Mark	Warning	May cause an allergic skin reaction

Respiratory Sensitization	1	Health Hazard	Warning	May cause allergy or asthma or breathing difficulties if inhaled
Carcinogenicity	1A	Health Hazard	Danger	May cause cancer
Specific Target Organ Toxicity Single Exposure	3	Exclamation Mark	Warning	May cause respiratory irritation
Specific Target Organ Toxicity Repeated Exposure	1	Health Hazard	Danger	Causes damage to lungs and central nervous system through prolonged and repeated inhalation exposure.

3. Composition Information on Ingredients

3.1 Composition Table

Ingredient	C.A.S. No.	Percent
Iron	7439-89-6	Balance
Carbon	7440-44-0	0.30 MAX.
Manganese	7439-96-5	1.20 MAX.
Phosphorous	7723-14-0	0.05 MAX.
Sulfur	7704-34-9	0.045 MAX.
Copper	7440-50-8	0.40 MAX.
Nickel	7440-02-0	0.40 MAX.
Chromium	7440-47-3	0.40 MAX.
Molybdenum	7439-98-7	0.15 MAX.
Vanadium	7440-62-2	0.08 MAX.

4. First-aid Measures

4.1 Description of first aid measures

Inhalation: (Fumes or dust from machining or welding) move to fresh air. If symptoms develop seek medical attention.

Skin Contact: For skin contact with dusts or powders, wash with soap and water. Cuts or abrasions should be treated promptly with thorough cleansing of the affected area.

Eye Contact: For contact with dust or particulates, flush eyes with water. Eye injuries from solid particles should be treated by a trained individual, such as a physician or nurse.

If Swallowed: No need for first aid is anticipated if material is swallowed, however if symptoms develop seek medical attention.

4.2 Indication of any immediate medical attentions and special treatment required

Solid particles in eyes should be promptly treated by a trained professional.

5. Fire-fighting Measures

5.1 Suitable extinguishing media

Not applicable for solid product. Use appropriate extinguishers for surrounding materials.

5.2 Specific hazards arising from the substance or mixture

N/A

5.3 Special protective actions for fire-fighters

N/A

6. Accidental Release Measures

6.1 Personal precautions, protective equipment, and emergency procedures

Not applicable for solid products. Dust collected from machining, grinding, etc. should be disposed of in accordance with federal, state, and local regulations.

6.2 Environmental precautions

Not applicable for product in solid state.

6.3 Methods and materials for containment and cleaning up

Collect material in appropriate, labeled containers for recovery or disposal in accordance with federal, state and local regulations.

7. Handling and Storage

7.1 Handling No special handling requirements.

7.2 Storage Store away from acids and incompatible materials.

8. Exposure Controls/Personal Protection

8.1 Control Parameters

Ingredient	TLV	PEL
Iron	5 mg/cu-m as fume	10 mg/cu-m as fume
Carbon	N/E	N/E
Manganese	.02 mg/cu-m (resp.) .1 mg/cu-m (IHL)	(C) 5 mg/cu-m
Phosphorous	.1 mg/cu-m	.1 mg/cu-m
Sulfur	N/E	N/E
Copper	.2 mg/cu-m as fume 1 mg/cu-m as dust	.1 mg/cu-m as fume 1 mg/cu-m as dust
Nickel	1.5 mg/cu-m (IHL as Ni metal) .2 mg/cu-m (IHL, insoluble inorganic compounds)	1 mg/cu-m
Chromium Chromium (hexavalent)	.5 mg/cu-m .05 mg/cu-m	1 mg/cu-m .005 mg/cu-m
Molybdenum	0.5 mg/cu-m (soluble resp.) 10 mg/cu-m (insoluble IHL) 3 mg/cu-m (insoluble resp.)	15 mg/cu-m total dust 5 mg/cu-m (soluble resp.)
Vanadium	N/E	(C).5 mg/cu-m as dust (C).1 mg/cu-m as fume

8.2 Exposure Controls

No specific controls are needed for solid product. If welding, grinding or machining provide general ventilation and/or exhaust if necessary to maintain concentrations below TLV's and PEL's.

8.3 Personal protective equipment (PPE)

Eye/face protection Safety glasses with side shields and/or face shields for particles (grinding). Welding goggles or helmet for welding.

Skin/hand protection Work gloves advisable for handling steel.

Respiratory protection Wear a NIOSH approved respirator for dusts or fume if concentrations exceed the TLV or PEL.

Other Protective Equipment: If noise is above 85dBA wear ear muffs or ear plugs.

9. Physical and Chemical Properties

9.1 Basic physical and chemical properties

Appearance: Metallic Gray

Odor: Odorless

Odor threshold: N/A

pH: N/A

Melting point/freezing point: Approximately 2750°F

Initial boiling point and boiling range: N/A

Flash Point: N/A

Evaporation rate: N/A

Flammability: Non-flammable

Upper/lower flammability or exposure limits: N/A

Vapor pressure: N/A

Vapor density: N/A

Relative density: 7.85 g/cc

Solubility (in water): Insoluble

Partition coefficient: N/A

Auto-ignition temperature: N/A

Decomposition temperature: N/A

Viscosity: N/A

10. Stability and Reactivity

10.1 Reactivity

N/A for product as a whole

10.2 Chemical Stability

Stable under normal storage and handling conditions

10.3 Possibility of hazardous reactions

10.4 Conditions to avoid

Storage with strong acids or calcium hypochlorite

10.5 Incompatible materials

Will react with strong acids to form hydrogen. Iron oxide dusts in contact with calcium hypochlorite evolve oxygen and may cause an explosion.

10.6 Hazardous decomposition products

Thermal oxidation decomposition of steel products can produce fumes containing oxides of iron as well as other alloying elements.

11. Toxicological Information

11.1 Information on Toxicological effects

Steel products in solid form do not present any toxicological effects, dusts and fumes generated from welding, machining, etc. may cause health effects.

Acute Effects:

Inhalation: Excessive inhalation of fumes and dust can produce an acute reaction known as “metal fume fever”. Symptoms consist of chills and fever, metallic taste in the mouth, dryness and irritation of the throat and weakness and muscle pain. Symptoms usually last 12 to 48 hours.

Ingestion: Ingestion of dust may cause nausea or vomiting. If swallowed call a poison center or doctor if you feel unwell.

Skin Contact: Skin contact with dusts may cause irritation or sensitization.

Eye contact: Exposure to high concentration of dusts may cause eye irritation.

Chronic Effects:

Prolonged or repeated over-exposure to iron oxide produced by grinding, welding, etc. may lead to siderosis. No physical impairment of lung function has been associated with siderosis.

Disclaimer: The information in this SDS is believed to be accurate, but under the circumstances is not warranted to be.