

MATERIAL SAFETY DATA SHEET

I. Identification Information

Emergency Telephone No. 800-327-9462

Product Name: **Galvanized Rolled Steel:**

Common Name(S): Wood Fasteners – Item #70020, 70030, 70130

II. Ingredients And Recommended Occupational Exposure Limits

Note: Steel Products Under Normal Conditions Do Not Present An Inhalation, Ingestion Or Contact Health Hazard (See Section Vi).

Base Metal Alloying Elements And Metallic Coatings	%Weight	Exposure Limits	
		OSHA PEL	ACGIH TLV
Base Metal: Iron (1309-37-1)	Balance	Dust & Fume 10mg/M3	5mg/M3(June)
Alloying Elements: Boron 1303-86-2	<0.015	10mg/M3 Dust	10mg/M3
Calcium 1317-65-3	<0.01	15mg/M3 Dust	10mg/M3
Carbon 7440-44-0	.01/.75	Total Dust-15mg/M3 Respirable 5mg/M3	10mg/M3
*Manganese 7439-96-5 .	15/1.75	1mg/M3 (Fume) 3mg/M3(Stel)(Fume)	5mg/M3(Dust) 1mg/M3(Fume)
Niobium	<0.015	N/A	N/A
Nitrogen 7727-37-9	<0.025	N/A	N/A
Phosphorus 7723-14-0	0/.15	.1mg/M3	.1 MG/M3
Silicon 7440-21-3	0/.50	Total Dust 10mg/M3	10mg/M3 (Fume)
Titanium 13463-67-7	<0.05	15mg/M3	10mg/M3
Vanadium 1314-62-1	<0.20	.5mg/M3 (Ceiling) Dust	.05mg/M3
Trace Elements: Arsenic 7440-38-2	0.0019	0.01mg/M3	0.01mg/M3
Sulfur 7704-34-9	0/.50	Total Dust 15mg/M3 Respirable Fraction 5mg/M3	10mg/M3
Cobalt 7440-48-4	0.0047	0.01mg/M3 10mg/M3	0.02mg/M3
*Copper 7440-50-8	0/.50	Fume cu) .1mg/M3 Dust/Mist(cu) 1mg/M3	.2mg/M3(Fume) 1mg/M3
*Nickel 7440-02-0	0/.20	1mg/M3	1mg/M3
*Lead 7439-92-1	<0.015	.05mg/M3	.05mg/M3
Tin 7440-31-5	<0.015	2mg/M3	2mg/M3
*Chromium 7440-47-3	0/.30	Chromium Compound (Ii& Iii As Cu)5mg/M3 Chromium Metal 1mg/M3	.5mg/M3 .05mg/M3(crVI)
Molybdenum 7439-98-7	0/.10	5mg/M3	10mg/M3

Base Metal Alloying Elements And Metallic Coatings	%Weight	Exposure Limits	
		OSHA PEL	ACGIH TLV
Zinc 7440-66-6	Balance	5mg/M3	5mg/M3 (Fume)
*Antimony 7440-36-6	<0/.02.	5mg/M3	.5mg/M3
Aluminum 7429-90-5 10mg/M3(Dust)	0/.20	Total Dust 15mg/M3 Respirable Fraction & Welding Fume 5mg/M3	5mg/M3(Welding Fume)

***Oil Coatings May Be Used. MSDS's For A Specific Coating Are Available Upon Request.**

**** Chrome Coatings May Be Used. MSDS's For A Specific Coating Are Available Upon Request**

Note: In Its Manufactured And Shipped State This Is Considered Non-Hazardous. Processing, However, May Generate Fumes And Particulate Matter.

*** 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 (40CFR 372).**

*** If This Product Is Re-Distributed Notification Must Be Supplied.**

III. Physical Data:

Melting Point: 2750 Appearance And Odor: Metallic Gray / No Odor

IV. Fire And Explosion Hazard Data

Steel Products In The Solid State Present No Fire Or Explosion Hazard.

Unusual Fire And Explosion Hazards - At Temperatures Above The Melting Point May Liberate Fumes Of Iron, Nickel, And Zinc Oxide.

V. Reactivity Data:

Stable Under Normal Conditions Of Use, Storage, And Transport. Will React With Strong Acid To Liberate Hydrogen. At Temperatures Above The Melting Point, May Liberate Fumes Containing Oxides Of Iron And Alloying Elements.

VI. Health Hazard Data:**Major Exposure Hazard**

Inhalation Skin Contact Eye Contact Ingestion

Chronic Inhalation Of High Concentrations Of Iron Oxide Fumes Or Dusts May Lead To A Benign Pneumoconiosis (Siderosis). Inhalation Of High Concentrations Of Ferric Oxide May Possibly Enhance The Risk Of Lung Cancer Development In Workers Exposed To Pulmonary Carcinogens.

The Inhalation Of High Concentrations Of Freshly Formed Oxide Fumes And Dusts Of Manganese, Copper, Lead And/Or Zinc In The Respirable Particle Size Range Can Cause An Influenza-Like Illness Termed Metal Fume Fever. Typical Symptoms Last 12 To 48 Hours And Are Characterized By Metallic Taste In The Mouth, Dryness And Irritation Of The Throat, Followed By Weakness, Muscle Pain, Fever And Chills.

Emergency And First Aid Procedures: For Overexposure To Airborne Fumes And Particulates, Remove Exposed Person To Fresh Air. If Breathing Is Difficult Or Has Stopped, Administer Artificial Respiration Or Oxygen As Indicated. Seek Medical Attention Promptly.

Treat Metal Fume Fever By Bed Rest, And Administer A Pain And Fever Reducing Medication.

VII. Spill Or Leak Procedures

Not Applicable To Steel In The Solid State.

Waste Disposal Method: Metals May Be Reclaimed. Dispose Of In A Land Fill In Accordance With All Local, State And Federal Regulations.

VIII. Special Protection Information

~~**Respiratory:** Niosh/Msha Approved Dust And Fume Respirators Should Be Used To Avoid Excessive Inhalation Of Particulates. Appropriate Respirator Selection Depends On The Magnitude Of Exposure.~~

Skin: Protective Gloves Should Be Worn As Required For Welding, Burning Or Handling Operations.

Eye: Use Safety Glasses Or Goggles As Required For Welding, Burning, Sawing, Brazing, Grinding Or Machining Operations.

Ventilation: Local Exhaust Ventilation Should Be Provided When Welding, Burning, Sawing, Brazing, Grinding Or Machining To Prevent Excessive Dust Or Fume Exposure.

Other Protective Equipment: Depending Upon The Conditions Of Use And Specific Work Situations, Additional Protective Equipment And/Or Clothing May Be Required To Control Exposures.

IX. Special Precautions:**Precautions To Be Taken In Handling And Storage:**

Operations With The Potential For Generating High Concentrations Of Airborne Particulates Should Be Evaluated And Controlled As Necessary. Avoid Breathing Metal Fumes And/Or Dusts.

Other Comments:

Medical Conditions Aggravated By Exposure: Individuals With Chronic Respiratory Disorders (I.E.: Asthma, Chronic Bronchitis, Emphysema, Etc.) May Be Adversely Affected By Any Fume Or Airborne Particulate Matter Exposure.

X. Regulatory Information:**California Proposition 65 Status:**

This product contains detectable amounts of substances regulated under the California's Safe Drinking Water and Toxic Enforcement Act (Proposition 65).

The information contained herein is based on current knowledge and experience; no responsibility is accepted that the information is sufficient or correct in all cases. Users should consider these data only as a supplement to other information. Users should make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials, the safety and health of employees and customers, and the protection of the environment.