



## SAFETY DATA SHEET

<b>Section 1.</b>	<b>IDENTIFICATION</b>
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<b>PRODUCT NAME :</b>	COLD ROLLED, LOW CARBON, NICKEL/ZINC PLATED STEEL STRIP
<b>COMPANY IDENTIFICATION :</b>	THOMAS STEEL STRIP DELAWARE AVENUE, N.W. WARREN, OHIO 44485
<b>EMERGENCY TELEPHONE NUMBER :</b>	(330) 841-6111
<b>TELEPHONE NUMBER FOR INFORMATION :</b>	(330) 841-6118
<b>DATE PREPARED :</b>	MAY, 2015

<b>Section 2.</b>	<b>HAZARD(S) IDENTIFICATION</b>
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HAZARDS COMPONENTS (Specific Chemicals Identity)			EXPOSURE LIMITS			
Ingredients	CAS#	% (weight)	Exposure (PEL as)	OSHA PEL mg/M <sup>3</sup>	ACGIH TLV mg/M <sup>3</sup>	ACGIH STEL mg/M <sup>3</sup>
Iron	7439-89-6	balance	Iron Oxide Fume	10	5	
<sup>1</sup> Zinc	7440-66-6	5.4 max.	Zinc Oxide Fume	5	1	
<sup>1</sup> Nickel	7440-02-0	1.0 max.	Nickel	1	1.5	
<sup>1</sup> & <sup>2</sup> Chromium	7440-47-3	< 1.0 max.	Trivalent Chrome	1	0.5	
Carbon	7440-44-0	0.001-1.03	Nuisance Dust	15	10	
Manganese	7439-96-5	0.15-0.99	Manganese Dust	5©	0.2	
			Manganese Fume	5©	1	3
Phosphorus	8049-19-2	0.001-0.04	Nuisance Dust	15	10	
Sulfur	7704-34-9	0.001-0.05	Nuisance Dust	15	10	
Silicon	7440-21-3	0.01-0.40	Nuisance Dust	15	10	
Aluminum	7429-90-5	0.02-0.09	Nuisance Dust * total **respirable dust	15*5**	10	
Antimony	7440-36-0	0.005-0.04	Antimony	0.5	0.5	
Columbium	7440-03-1	0.01-0.15	Nuisance Dust	15	10	
Titanium	7440-32-6	0.01-0.15	Nuisance Dust	15	10	
Boron	7440-42-8	0.005-0.01	Nuisance Dust	15	10	
Copper	7440-50-8	0.01-0.20	Copper Fume	0.1	0.2	
<sup>1</sup> - SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT						
<sup>2</sup> - THIS PRODUCT MAY BE TREATED WITH CHROMATE AT CUSTOMER'S REQUEST.						
This product may contain trace elements such as: aluminum, arsenic, boron, cadmium, calcium, chromium, cobalt, columbium, copper, lead, molybdenum, nickel, phosphorus, silicon, sulfur, tin, tantalum, titanium, vanadium, and zirconium may be present in the trace amounts. *Note - A coating of petroleum oil may be added for corrosion protection. © -Denotes Ceiling Limit						

<b>Section 3.</b>	<b>COMPOSITION/INFORMATION ON INGREDIENTS</b>
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Boiling Point	N/A
Melting Point	2400 to 2800 °F
Vapor Density	N/A

<b>Section 4.</b>	<b>FIRST-AID MEASURES</b>
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EYE CONTACT :  
N/A

SKIN CONTACT :  
N/A

INGESTION :  
N/A

INHALATION :  
N/A

NOTE TO PHYSICIAN :  
N/A

<b>Section 5.</b>	<b>FIRE-FIGHTING MEASURES</b>
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FLASH POINT : N/A

EXTINGUISHING MEDIA :  
N/A

FIRE AND EXPLOSION HAZARD :  
N/A

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTING :  
N/A

<b>Section 6.</b>	<b>ACCIDENTAL RELEASE MEASURES</b>
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PERSONAL PRECAUTIONS :  
N/A

METHODS FOR CLEANING UP :  
N/A

ENVIRONMENTAL PRECAUTIONS :  
N/A

<b>Section 7.</b>	<b>HANDLING AND STORAGE</b>
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**HANDLING :**

Avoid repeated skin contact. Wear suitable gloves. Safety glasses and long sleeved shirts are recommended.

**STORAGE CONDITIONS :**

**SUITABLE CONSTRUCTION MATERIALS :**

<b>Section 8.</b>	<b>EXPOSURE CONTROLS/PERSONAL PROTECTION</b>
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**OCCUPATIONAL EXPOSURE LIMITS :**

**ENGINEERING MEASURES :**

Ventilation - Local Exhaust: As required to maintain exposure below PEL.

**RESPIRATORY PROTECTION :**

NIOSH approved respirator selected according to OSHA 29 CFR 1910.134 if PEL is exceeded

**HAND PROTECTION :**

Heavy Duty Cloth or Leather

**SKIN PROTECTION :**

Long sleeves & wristlets. Sensitized individuals may experience an allergic skin rash or asthma

**EYE PROTECTION :**

Safety Glasses/Goggles. Irritation of eyes, nose and throat. Allergic skin rashes. Possible metallic taste.

**HYGIENE RECOMMENDATIONS :**

Wash thoroughly after handling, launder clothing and gloves

**HUMAN EXPOSURE CHARACTERIZATION :**

For skin rashes seek medical attention. Cleanse wounds thoroughly to remove any particles. Remove to fresh air & seek medical attention

<b>Section 9.</b>	<b>PHYSICAL AND CHEMICAL PROPERTIES</b>
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**PHYSICAL STATE :**

**APPEARANCE :** Silver/gray

**ODOR :** Odorless

**SPECIFIC GRAVITY :** 7.5 to 8.5

DENSITY :  
SOLUBILITY IN WATER :  
pH (100%) :  
VAPOR PRESSURE : N/A  
EVAPORATION RATE : N/A  
VOC CONTENT :

<b>Section 10.</b>	<b>STABILITY AND REACTIVITY</b>
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STABILITY :  
Stable

HAZARDOUS POLYMERIZATION :  
Will not occur

CONDITIONS TO AVOID :  
N/A

MATERIALS TO AVOID :  
Acids, Strong Oxidizers

HAZAROUS DECOMPOSITIONS PRODUCTS :  
Metal oxides of listed ingredients

<b>Section 11.</b>	<b>TOXICOLOGICAL INFORMATION</b>
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ACUTE ORAL TOXICITY :

ACUTE DERMAL TOXICITY :

ACUTE INHALATION TOXICITY :

SENSITIZATION :

CARCINOGENCITY :

HUMAN HAZARD CHARACTERIZATION :

\*\*Steel products in their natural state do not present an inhalation, ingestion or contact hazard. However, operations such as burning, cutting, welding, sawing, brazing and/or grinding may result in the following effects if the PEL as listed in section ii are exceeded.

<b>Section 12.</b>	<b>ECOLOGICAL INFORMATION*</b>
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ECOTOXICOLOGICAL EFFECTS :

PERSISTENCY AND DEGRADATION :

MOBILITY :

SENSITIZATION :

CARCINOGENICITY :

HUMAN HAZARD CHARACTERIZATION :

<b>Section 13.</b>	<b>DISPOSAL CONSEDERATIONS*</b>
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Consult federal, state and local regulations

<b>Section 14.</b>	<b>TRANSPORT INFORMATION*</b>
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See State and Federal regulatory guidelines regarding proper transportation.

<b>Section 15.</b>	<b>REGULATORY INFORMATION*</b>
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Consult federal, state and local regulations

<b>Section 16.</b>	<b>OTHER INFORMATION</b>
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Judgments as to the suitability of information herein or the purchaser's purposes are necessarily the purchaser's responsibility. Reasonable care has been taken in the preparation of this information, but TSS extends no warranties, makes no representations and assumes no responsibility as to the accuracy or suitability of this information for any purchaser's use or for any consequence of its use.

\* NOTE: Since other Agencies regulate this information, OSHA will not be enforcing Section 12 - 15.