

MATERIAL SAFETY DATA SHEET

Abbreviations used on this Material Safety Data Sheet:

N/av. = Not available, N/ap. = Not applicable, ppm = parts per million, TWA = Time weighted average.

WHMIS CLASS: NOT A CONTROLLED PRODUCT

SECTION 1 - PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER:	STEEL WIRE NAILS, BRIGHT
PRODUCT USE:	Various applications.
SUPPLIER:	Tree Island Industries Ltd. P.O. Box 50, New Westminster, BC, Canada, V3L 4Y1
TELEPHONE:	(604) 524-3744, Business hours. (604) 524-3756, 24-hour Emergency Number

SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	%	CAS NUMBER	LETHAL DOSE (50%) (SPECIES, ROUTE)	LETHAL CONCENTRATION (50%) (SPECIES, ROUTE)
Iron	95	7439-89-6	N/av.	N/av.
Manganese	.2 to 1	7439-96-5	N/av.	N/av.
Chromium	Up to 0.1	7440-47-3	N/av.	N/av.
Nickel	Up to 0.1	7440-02-0	N/av.	N/av.

SECTION 3 - PHYSICAL DATA

PHYSICAL STATE:	Solid	ODOUR, APPEARANCE:	Odourless.	ODOUR THRESHOLD:	N/ap.
VAPOUR PRESSURE:	N/a.	VAPOUR DENSITY:	N/ap.	EVAPORATION RATE:	N/ap.
				BOILING POINT:	3000 C
pH:	N/ap.	SPECIFIC GRAVITY:	7.85	COEFFICIENT OF WATER/OIL DISTRIBUTION:	Not soluble in water.
				MELTING POINT:	1300 C

SECTION 4 - FIRE AND EXPLOSION DATA

FLAMMABILITY:	Massive metal is not flammable.				
YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>		
MEANS OF EXTINGUISHMENT:	No fire or explosion hazard – not combustible				
SPECIAL PROCEDURES:	N/a				
FLASHPOINT:	N/ap.	UPPER FLAMMABILITY LIMIT: (% BY VOLUME)	N/av.	LOWER FLAMMABILITY LIMIT: (% BY VOLUME)	N/av.
AUTOIGNITION TEMPERATURE:	N/a	HAZARDOUS COMBUSTION PRODUCTS:	N/a		
SENSITIVITY TO IMPACT:	Not sensitive. Stable material.			SENSITIVITY TO STATIC DISCHARGE:	Massive metal not sensitive.

SECTION 5 - REACTIVITY DATA

CHEMICAL STABILITY:	Massive metal is stable.				
YES	<input checked="" type="checkbox"/>	NO	<input type="checkbox"/>		
INCOMPATIBILITY:	Avoid contact with strong acids which will react with the product to form flammable hydrogen gas.				
YES	<input checked="" type="checkbox"/>	NO	<input type="checkbox"/>		
REACTIVITY:	Hazarous polymerization will not occur.				
HAZARDOUS DECOMPOSITION PRODUCTS:	None				

PRODUCT IDENTIFIER: **STEEL WIRE NAILS, BRIGHT**

SECTION 6 - TOXICOLOGICAL PROPERTIES

ROUTES OF ENTRY:

Inhalation: Only when heated. Skin: Minor Eyes: Minor Ingestion: minor

EFFECTS OF ACUTE EXPOSURE TO PRODUCT:

Metal fume formed from welding or heating of metal may cause respiratory irritation. Skin irritation is unlikely. Eye contact causes irritation due to the presence of a coatings only. Ingestion is unlikely to produce toxic effects.

EFFECTS OF CHRONIC EXPOSURE TO PRODUCT:

Prolonged or repeated contact with skin can cause dermatitis. Nickel is listed by IARC in Group 2B (possible human carcinogen). The NTP lists Nickel as a chemical which 'may reasonably be anticipated to be a carcinogen'. The ACGIH lists Nickel with carcinogenicity designation A5 – Not Suspected as a Human Carcinogen. Chromium is listed by IARC in Group 3 (Not Classifiable).

EXPOSURE LIMITS: mg/m3 ACGIH TLV - iron fume : 5 - manganese fume : 1 - Chromium: 0.5 - nickel: 1	IRRITANCY : As above.	SENSITIZATION: Not reported.	CARCINOGENICITY: Nickel component is possible human carcinogen.
TERATOGENICITY: Not reported.	REPRODUCTIVE TOXICITY: Not reported.	MUTAGENICITY: Not reported.	SYNERGISTIC PRODUCTS: Not reported.

SECTION 7 - PREVENTIVE MEASURES

GLOVES: General protective gloves.	RESPIRATOR : Respiratory protection normally not required. If fumes or dust are generated, use approved respiratory protection.	EYE: Safety glasses
FOOTWEAR: Safety boots.	CLOTHING : Coveralls or other work clothes.	OTHER: Eye wash station must be available.
ENGINEERING CONTROLS: A combination of general dilution ventilation and local exhaust should be used when fumes or dusts are generated.		
LEAK AND SPILL PROCEDURE: N/ap.		
WASTE DISPOSAL: Follow all national, provincial, and local regulations.		
HANDLING PROCEDURES AND EQUIPMENT: Use adequate ventilation and personal protective equipment.		
STORAGE REQUIREMENTS: Store away from incompatible materials. See Section 5 of this MSDS.		
SPECIAL SHIPPING INFORMATION: Not dangerous goods.		

SECTION 8 - FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with water for 15 minutes while retracting eyelids. Seek medical attention.
SKIN CONTACT: Maintain good personal hygiene, wash with soap and water. Seek medical attention if necessary.
INHALATION: Remove victim to fresh air. Seek immediate medical attention.
INGESTION: Not generally expected. Seek medical attention if necessary.

SECTION 9 – PREPARATION DATE OF MSDS

PREPARED BY: Sofya Solodkin, P.Eng, Tree Island Industries	PHONE NUMBER: (604)-524-3744	DATE: December 18,2001, reapproved Jan.14/2010
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