

SAFETY DATA SHEET

SECTION 1: Identification

Product identifier: Steel Strapping, Seals and Accessories
Product code: 907
Recommended use: Packaging and securing for shipping purposes
WHMIS class: D2A and D2B
Recommended restrictions: None

Manufacturer/Supplier/Importer/ Distributor Information:

Company name: Samuel Strapping Systems, Inc.
Address: 1455 James Parkway
Heath, Ohio 43056
Telephone: 740-522-2500
Fax: 740-522-2558

Company name: Samuel Strapping Systems, Inc.
Address: 2370 Dixie Road
Mississauga, Ontario, Canada L4Y 1Z4
Telephone: 905-279-9580
Fax: 905-279-8016
Emergency telephone: 905-279-9580

SECTION 2: Hazards Identification

Physical hazards: Skin irritation [Category 1]
Eye damage [Category 1]

Signal word: Warning

Health hazards: Causes skin irritation
Causes serious eye damage
Inhalation of metal particulate or elemental oxide fumes causes chronic health effects and carcinogen

Label elements:



Precautionary statements:

Prevention: Wear leather-faced glove, C.S.A approved safety eyewear with side shields, C.S.A approved safety footwear with metatarsal protection when handling coils. Fume filter respirator, gloves and eyewear required if subjected to high temperature applications.

Response: If contact with skin: wash with soap and water. For overexposure to metal fume remove person to fresh air and seek medical attention if necessary.

Storage: Keep stored material dry to prevent corrosion

SAFETY DATA SHEET



SECTION 2: Hazards Identification

Disposal: Recycle scraps metal where possible

SECTION 3: Composition/Information on Ingredients

Base Metal

Element	CAS #	Weight %
Iron	7439-89-6	90 - 99
Manganese	7439-96-5	1 – 5
Chromium	7440-47-3	0.5 - 1.5
Nickel	7440-02-0	0.1 - 1.0
Copper	7440-50-8	0.1 - 1.0
Molybdenum	7439-98-7	0.1 - 1.0

Coatings

Coating	Component	CAS#	Weight (%)
Galvanized	Zinc	7440-66-6	1 - 10
Zinc Paint	Zinc	7440-66-6	0.5 – 1.5
Blue Paint	Titanium Dioxide	13463-67-7	0.1 – 1.0
Green Paint	Titanium Dioxide	13463-67-7	0.1 – 1.0
	C.I. Pigment Yellow	51274-00-1	0.1 – 1.0
Red Paint	Iron Oxide	1309-37-1	0.1 – 1.0
	Titanium Dioxide	13463-67-7	0.1 – 1.0
Black Paint	None	--	--

SECTION 4: First–Aid Measures

Inhalation: For overexposure to metal fume remove person to fresh air and seek medical attention if necessary.

Skin contact: Maintain good personal hygiene. If contact with skin: wash with soap and water.

Symptoms/effects, acute and delayed: Inhalation or overexposure to manganese, copper or zinc (coated products) may cause metal fume fever characterized by fever and chills (i.e. flu-like symptoms) appear 4-6 hours after exposure with no long term effects.

General information: If exposed or concerned, get medical advice/attention. If you feel unwell, seek medical advice. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

SAFETY DATA SHEET



SECTION 5: Fire-Fighting Measures

Suitable extinguishing media: Dry chemical, carbon dioxide, foam and water

Specific hazards arising from the steel strapping: Welding fume and contact with mineral acids will release flammable hydrogen gas

Special protective equipment and precautions for firefighters: Self contained breathing apparatus and full protective clothing must be worn in case of fire. Move steel strapping from fire area if you can do so without risk.

SECTION 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Keep unnecessary personnel away. Wear appropriate protective equipment and clothing. Do not breathe the welding fume. Ensure adequate ventilation.

SECTION 7: Handling and Storage

Precaution for safe Handling: Avoid contact with skin and eyes

Conditions for safe Storage: Keep stored material dry to prevent corrosion

Storage incompatibilities: Avoid mineral acids will release flammable hydrogen gas

SECTION 8: Exposure Controls/Personal Protection

Occupational Exposure Limit on Base Metal

Component	TLV ACGIH (mg/m ³)	Toxicity (LD 50)
Iron	5.0 (fume)	Unavailable
Manganese	5.0	9 g/Kg oral -Rat
Chromium	0.5	> 10 g/Kg oral -Rat
Nickel	1.0	> 9 g/Kg oral -Rat
Copper	1.0	Unavailable
Molybdenum	1.0	Unavailable

SAFETY DATA SHEET



SECTION 8: Exposure Controls/Personal Protection

Occupational Exposure Limit on Coatings

Coating	Component	TLV ACGIH (mg/ m ³)	Toxicity (LD 50)
Galvanized	Zinc	2 (oxide)	630 mg/Kg oral - rat
Zinc Paint	Zinc	2 (oxide)	630 mg/Kg oral - rat
Blue Paint	Titanium Dioxide	10	Unavailable
Green Paint	Titanium Dioxide	10	Unavailable
	C.I. Pigment Yellow	Unavailable	Unavailable
Red Paint	Iron Oxide	5	Unavailable
	Titanium Dioxide	10	Unavailable
Black Paint	None	--	--

Appropriate engineering controls:

Local exhaust ventilation not required during normal use

Personal protective equipment

Eye/face protection:

Wear safety glasses with side shields (or goggles)

Gloves:

Rubber or Leather-faced ANSI Level 3 Cut Resistant

Footwear:

Approved safety footwear when handling coils

Others:

ANSI Level 3 Cut Resistant Sleeves. Fume filter respirator, gloves and eyewear required if subjected to high temperature application

General hygiene Considerations:

Maintain good personal hygiene. If contact with skin: wash with soap and water.

SECTION 9: Physical and Chemical properties

Physical form:

Solid

Density:

7.86

Odor:

Not available

Odor threshold:

Not available

Vapor density:

Not available

pH:

Not available

Color:

Silver gray metallic (bare steel)

Melting point:

1530 °C

Freezing point:

Not available

Boiling point:

Not available

Vapor pressure:

Not available

Solubility in water:

Not available

Coefficient water:

Not available

Oil distribution:

Not available

SAFETY DATA SHEET



SECTION 10: Stability and Reactivity

Reactivity:	This product is stable and non reactive under normal conditions of use, storage and transport
Chemical stability:	This product is stable and non reactive under normal conditions of use, storage and transport
Possibility of hazardous Reactions:	None known
Conditions to avoid:	Contact with mineral acids will release flammable hydrogen gas
Incompatible material:	Mineral acids (sulfuric acid, nitric acid, hydrochloric acid, etc.)
Hazardous decomposition Products:	None known

SECTION 11: Toxicological information

Acute toxicity:	Inhalation or overexposure to manganese, copper or zinc (coated products) may cause metal fume fever characterized by fever and chills (i.e. flu-like symptoms) appear 4-6 hours after exposure with no long term effects.
Chronic toxicity:	Chronic inhalation or overexposure to metal fume(Iron oxide fume) may cause a benign pneumoconiosis (siderosis) with few or no symptoms
Route of exposure:	Prolonged skin contact with coated steel may cause skin irritation in sensitive individuals. Inhalation of metal particulate or elemental oxide fumes generated during welding, burning, grinding or machining may pose acute and chronic health effects.
Irritancy of material:	None known
Reproductive effects:	None known
Sensitization to material:	None known
Teratogenicity of material:	None known
Mutagenicity of material:	Zinc: investigated as a mutagen
Carcinogenicity:	Titanium dioxide: classified as IARC group 2B carcinogen "Possible carcinogen to humans"
Synergistic materials:	None known

SAFETY DATA SHEET



SECTION 12: Ecological Information

Ecotoxicity

Fish:	No data available
Crustacean:	No data available
Algae:	No data available
Persistence and Degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available
Partition coefficient:	No data available
n-octanol/water:	No data available
Soil adsorption:	No data available

SECTION 13: Disposal Consideration

Disposal of product: Waste must be disposed of in accordance with federal, state and local environmental control regulations. Recycle scraps metal where possible

SECTION 14: Transport Information

DOT (U.S.A.):	Not regulated
IATA:	Not regulated
IMDG:	Not regulated

SECTION 15: Regulatory information

Toxic Substance Control Act (TSCA 8b): All ingredients are included in the TSCA Chemical Inventory.

SARA TITLE III

SECTION 302:	none
SECTION 311/312:	none
SECTION 313:	none

RCRA: Discarded product is not considered a hazardous waste

CANADIAN: All components listed on Domestic Substances List

HMIS classification:

Health:	0
Flammability:	0
Physical:	1
PPE:	B

NFPA Rating:

Health:	0
Flammability:	0
Instability:	0

SAFETY DATA SHEET



SECTION 16: Other Information

Revision Date: 2/18/2015

Revision number: 2

Samuel strapping steel is for packaging and securing for shipping purposes. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Keep stored material dry to prevent corrosion. Handling the steel strap with safety precautions including the use of appropriate protective equipment (e.g. safety glasses with side shield, goggles, leather- faced gloves, approved safety footwear with metatarsal protection and fume filter respirator if the steel strapping subjected to high temperature application). For disposal always comply with federal, state and local regulations