

Material Safety Data Sheet

Updated - November 2011

Section 1 - Product Identification

Product Name: STAINLESS STEEL SPRING WIRE

This MSDS covers all Stainless Steel Spring Wire products manufactured by National-Standard at the following location:

1631 Lake Street
Niles, MI 49120
(269) 683-8100

Section 1-A - Trade Name and Nominal Composition

All materials listed have a Wt. % of 1% or Greater

<u>Product Name</u>	<u>Cr</u> ¹	<u>Mn</u>	<u>Ni</u> ¹	<u>Si</u>
NS 302 SS	17-19	2.0	8-10	1.0
NS 304 SS	18 -20	2.0	8-10.5	1.0
NS 305 SS	17-19	2.0	10.5-13	1.0

Section 2 - Hazardous Ingredients

This section covers the materials contained in the product as shipped.

IMPORTANT

<u>Ingredient</u>	<u>CAS No.</u>	<u>PEL</u> ²	<u>TLV</u> ³	<u>REL</u> ⁴	<u>STEL</u> ⁵	<u>IDLH</u> ⁶
Chromium (Cr)	7440-47-3	1.0	0.5	0.5		25
Iron Oxide Dust (as Fe)	1309-37-1	10.0	10.0	5.0		2500
Manganese (Mn)	7439-96-5	(C)5.0 ⁷	0.2	1.0	3.0	500
Nickel (Ni)	7440-02-0	1.0	1.5	0.015		10

Note: All values are in mg/m³

Section 3 - Hazard ID and Emergency Overview

WARNING: Protect yourself and others. Read and understand this information. Wash hands prior to eating, drinking or smoking.

SHORT-TERM EXPOSURE: None

LONG-TERM EXPOSURE: Chromium and nickel, and their compounds, are on the International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP) lists as posing a carcinogenic risk to humans.

Section 4 - First Aid Measures

EMERGENCY AND FIRST AID: High tensile wire can cause serious wire pokes, cuts and scraps. Apply pressure to injury to stop bleeding. Clean wound and bandage. Seek medical attention.

Section 5 - Fire and Explosion Hazard Data

Flammability: This material is not flammable.

National Fire Protection Association (NFPA) Rating: Health - 1 Flammability - 0 Reactivity - 0

Section 6 - Spill or Leak Procedure

Spill of Leak Procedure: Not Applicable

Section 7 - Handling and Storage

Precautions: Keep dry and protected from rain and snow.

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Section 8 - Exposure Controls & Personal

SKIN ADSORPTION: Wash hands prior to eating drinking or smoking after handling stainless steel wire.

EYE PROTECTION: Wear safety glasses to protect eyes from wire pokes, cuts and scraps.

PROTECTIVE CLOTHING: Wear gloves, hard hat and body protection which help to prevent injury from wire pokes, cuts and scraps.

Section 9 - Physical and Chemical Properties

Stainless Steel Spring Wire is a solid metal, shaped as wire of various diameters, with a high tensile strength. No other physical properties apply.

Section 10 - Stability & Reactivity Information

Materials to Avoid: None

Stability Condition to Avoid: None

Hazardous Polymerization: Will Not Occur

Hazardous Decomposition Products: None

Section 11 - Toxicological Information

Toxicological Information: Chromium and Nickel, and their compounds, are on the International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP) lists as posing a carcinogenic risk to humans.

Section 12 - Ecological Information

Ecological Information: Not Applicable

Section 13 - Disposal Considerations

Waste Disposal Methods: Prevent waste from contaminating surrounding environment. Discard any product, residue, disposable container, or liner in an environmentally acceptable manor, in full compliance with federal state and local regulations.

Section 14 - MSDS Transportation Information

Proper Shipping Name: Not regulated by DOT, IMO, or IATA.

Section 15 - Regulatory Information

SARA Title III: Not Applicable.

TSCA: All material contained within this product are on the TCSA Inventory List.

California Proposition 65 Warning: This product, contains chemicals known to the state of California to cause cancer (California Health & Safety Code § 25249.6).

Section 16 - Other Information

MSDS NOTES:

- (1) Listed as Carcinogen by IARC and NTP.
- (2) Permissible Exposure Limit (PEL) - 8-hour TWA exposure as defined by OSHA (29CFR1910).
- (3) Threshold Limit Value (TLV) - 8-hour TWA as defined by American Conference of Governmental Industrial Hygienists (ACGIH).
- (4) Recommended Exposure Limit (REL) - 8-hour TWA as defined by National Institute of Occupational Safety & Health (NIOSH).
- (5) Short Term Exposure Limit (STEL) - 15 minute TWA exposure as defined by OSHA (29CFR1910.1200) or certain state regulations.
- (6) Immediately Dangerous to Life & Health (IDLH) – As defined by OSHA and NIOSH.
- (7) Ceiling Value (C) - Exposure which shall not be exceeded at any time during the working day.

Approved By: Ronald F. Spears, Jr., CHMM, Mgr., EHS&S **Date:** November 23, 2011

This data is believed to be accurate and was obtained from recognized technical sources, but cannot be warranted as to its accuracy or sufficiency. See www.nationalstandard.com for most recent MSDS.