

## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product Identifier

SDS # INTRA-009-EU  
 Product Name NiChrome Fiber

Contains Nickel

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use For industrial use

### 1.3. Details of the Supplier of the Safety Data Sheet

#### Supplier

IntraMicron, Inc.  
 368 Industry Dr.  
 Auburn, AL 36832

#### For further information, please contact

Contact Point Phone IntraMicron, Inc: 1-334-502-2973  
 Email Address [pdimick@intramicron.com](mailto:pdimick@intramicron.com)

### 1.4. Emergency telephone number

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)  
 1-800-535-5053 (North America)

## Section 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

*Regulation (EC) No 1272/2008*

Skin sensitisation	Category 1 - (H317)
Carcinogenicity	Category 2 - (H351)
Specific target organ toxicity — repeated exposure	Category 1 - (H372)
Chronic aquatic toxicity	Category 1 - (H410)

### 2.2. Label Elements

#### Product Identifier

Contains Nickel



#### Signal Word

Danger

**Hazard statements**

H317 - May cause an allergic skin reaction  
 H351 - Suspected of causing cancer  
 H372 - Causes damage to organs through prolonged or repeated exposure  
 H410 - Very toxic to aquatic life with long lasting effects

**Precautionary Statements - EU (§28, 1272/2008)**

P201 - Obtain special instructions before use  
 P202 - Do not handle until all safety precautions have been read and understood  
 P260 - Do not breathe dust/fume/gas/mist/vapours/spray  
 P264 - Wash face, hands and any exposed skin thoroughly after handling  
 P270 - Do not eat, drink or smoke when using this product  
 P272 - Contaminated work clothing should not be allowed out of the workplace  
 P273 - Avoid release to the environment  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P391 - Collect spillage  
 P308 + P313 - IF exposed or concerned: Get medical advice/attention  
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
 P363 - Wash contaminated clothing before reuse  
 P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention  
 P405 - Store locked up  
 P501 - Dispose of contents/ container to an approved waste disposal plant

**2.3. Other Hazards**

No information available

**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2 MIXTURES**

Chemical name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
Nickel	Present	7440-02-0	76-83	Skin Sens. 1 (H317) Carc. 2 (H351) STOT RE 1 (H372)	Not determined
Chromium	Present	7440-47-3	18-22	Not determined	Not determined

**Full text of H- and EUH-phrases: see section 16**

**Additional Information**

Substances without a classification are included, because they have established occupational exposure limits  
 This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

**Section 4: FIRST AID MEASURES****4.1. Description of First Aid Measures**

<b>General Advice</b>	If exposed or concerned: Get medical advice/attention.
<b>Eye Contact</b>	Rinse immediately with plenty of water and seek medical advice.
<b>Skin Contact</b>	Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
<b>Inhalation</b>	Remove to fresh air.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water.

**4.2. Most Important Symptoms and Effects, Both Acute and Delayed****Symptoms**

May cause an allergic skin reaction. Suspected of causing cancer. Causes damage to organs through prolonged or repeated exposure. Short term exposure to fumes / dust may produce irritation of eyes and respiratory system. Inhalation of high concentrations of freshly formed oxide fumes of iron, manganese and copper may cause metal fume fever, characterized by a metallic taste in the mouth, dryness and irritation of the throat and influenza-like symptoms. Chronic inhalation of high concentrations of iron oxide fumes or dust 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.

**4.3. Indication of any Immediate Medical Attention and Special Treatment Needed****Notes to Physician**

Treat symptomatically.

**Section 5: FIREFIGHTING MEASURES****5.1. Extinguishing Media****Suitable Extinguishing Media**

Water, carbon dioxide or dry chemical ('D' type Extinguisher).

**Unsuitable Extinguishing Media**

Not determined.

**5.2. Special Hazards Arising from the Substance or Mixture**

May burn (hot) if ignited, highly dependent on fiber diameter.

**5.3. Advice for Firefighters**

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

**Section 6: ACCIDENTAL RELEASE MEASURES****6.1. Personal Precautions, Protective Equipment and Emergency Procedures****Personal Precautions**

Use personal protective equipment as required.

**For Emergency Responders**

Use personal protection recommended in Section 8.

**6.2. Environmental Precautions**

See Section 12 for additional Ecological Information.

**6.3. Methods and Material for Containment and Cleaning Up****Methods for Containment**

Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up**

Sweep up spills and place in a waste disposal container. Flush area with water.

**6.4. Reference to Other Sections**

See Section 13: DISPOSAL CONSIDERATIONS.

## Section 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

#### **Advice on Safe Handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing and eye/face protection. Contaminated work clothing must not be allowed out of the workplace. Do not breathe dust/fume/gas/mist/vapours/spray. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.

#### **General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice.

### 7.2. Conditions for Safe Storage, Including any Incompatibilities

#### **Storage Conditions**

Store locked up.

### 7.3. Specific End Use(s)

#### **Specific Use(s)**

For industrial use.

#### **Risk Management Methods (RMM)**

The information required is contained in this Safety Data Sheet.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

#### **Exposure Limits**

Chemical name	European Union	United Kingdom	France	Spain	Germany
Nickel 7440-02-0	-	STEL: 1.5 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup> Skin	TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 0.03 mg/m <sup>3</sup> TWA: 0.006 mg/m <sup>3</sup>
Chromium 7440-47-3	TWA: 2 mg/m <sup>3</sup>	STEL: 1.5 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Nickel 7440-02-0	-	TWA: 1.5 mg/m <sup>3</sup>	-	TWA: 0.01 mg/m <sup>3</sup> TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>
Chromium 7440-47-3	TWA: 0.5 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Nickel 7440-02-0	-	TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.25 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup> STEL: 0.15 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup> STEL: 1.5 mg/m <sup>3</sup>
Chromium 7440-47-3	TWA: 2 mg/m <sup>3</sup>	Skin TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup> STEL: 1.5 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> STEL: 6 mg/m <sup>3</sup>

### 8.2. Exposure Controls

#### **Engineering Controls**

Showers. Eyewash stations. Ventilation systems.

#### **Personal Protective Equipment**

##### **Eye/Face Protection**

Avoid contact with eyes.

##### **Hand Protection**

Gloves are not required for normal use.

##### **Skin and Body Protection**

Suitable protective clothing.

##### **Respiratory Protection**

Ensure adequate ventilation, especially in confined areas.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

<b>Physical state</b>	Solid	<b>Odour</b>	None
<b>Appearance</b>	Metallic fiber	<b>Odour Threshold</b>	Not determined
<b>Colour</b>	Not determined		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	Not determined	
<b>Melting point / freezing point</b>	>1200 °C / >2200 °F	
<b>Boiling point / boiling range</b>	Not determined	
<b>Flash point</b>	>260 °C / >500 °F	
<b>Evaporation Rate</b>	0	
<b>Flammability (Solid, Gas)</b>	Not determined	
<b>Flammability Limit in Air</b>		
<b>Upper flammability or explosive limits</b>	Not determined	
<b>Lower flammability or explosive limits</b>	Not determined	
<b>Vapour Pressure</b>	Not determined	
<b>Vapour Density</b>	Not determined	
<b>Relative Density</b>	7.4-9.1 grams/cubic centimeter	
<b>Water Solubility</b>	None	
<b>Solubility(ies)</b>	Not determined	
<b>Partition Coefficient</b>	Not determined	
<b>Autoignition temperature</b>	Not determined	
<b>Decomposition temperature</b>	Not determined	
<b>Kinematic viscosity</b>	Not determined	
<b>Dynamic Viscosity</b>	Not determined	
<b>Explosive Properties</b>	Not determined	
<b>Oxidising Properties</b>	Not determined	

## Section 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

Not reactive under normal conditions.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of Hazardous Reactions

#### **Hazardous Polymerisation**

Will not occur.

#### **Possibility of Hazardous Reactions**

None under normal processing.

### 10.4. Conditions to Avoid

Incompatible Materials.

### 10.5. Incompatible Materials

Strong acids.

### 10.6. Hazardous Decomposition Products

Thermal decomposition or combustion may produce oxides of nickel, chromium and iron.

## Section 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on Toxicological Effects

#### Acute toxicity

#### Product Information

<b>Inhalation</b>	Do not inhale.
<b>Eye Contact</b>	Avoid contact with eyes.
<b>Skin Contact</b>	Avoid contact with skin.
<b>Ingestion</b>	Do not ingest.

The following values are calculated based on chapter 3.1 of the GHS document

**ATEmix (oral)** 8,997.70 mg/kg

#### Unknown Acute Toxicity

- 100 % of the mixture consists of ingredient(s) of unknown toxicity.
- 20 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
- 100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
- 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
- 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).
- 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

#### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Nickel	> 9000 mg/kg ( Rat )		> 10.2 mg/L ( Rat ) 1 h
Iron	= 30 g/kg ( Rat )		

<b>Skin corrosion/irritation</b>	Not classified.
<b>Serious eye damage/eye irritation</b>	Not classified.
<b>Sensitisation</b>	May cause an allergic skin reaction.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	Suspected of causing cancer.

Chemical name	European Union
Nickel	Carc. 2

<b>Reproductive toxicity</b>	Not classified.
<b>STOT - single exposure</b>	Not classified.
<b>STOT - repeated exposure</b>	Causes damage to organs through prolonged or repeated exposure.
<b>Aspiration hazard</b>	Not classified.

## Section 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Very toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Nickel	0.18: 72 h Pseudokirchneriella subcapitata mg/L EC50 0.174 - 0.311: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	1.3: 96 h Cyprinus carpio mg/L LC50 semi-static 10.4: 96 h Cyprinus carpio mg/L LC50 static 100: 96 h Brachydanio rerio mg/L LC50	100: 48 h Daphnia magna mg/L EC50 1: 48 h Daphnia magna mg/L EC50 Static

**12.2. Persistence and Degradability**

Not determined.

**12.3. Bioaccumulative Potential**

There is no data for this product.

**12.4. Mobility in Soil****Mobility**

Not determined.

**12.5. Results of PBT and vPvB Assessment**

Not determined.

**12.6. Other Adverse Effects**

Not determined.

**Section 13: DISPOSAL CONSIDERATIONS****13.1. Waste Treatment Methods****Waste from residues/unused products**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging**

Improper disposal or reuse of this container may be dangerous and illegal.

**Section 14: TRANSPORT INFORMATION****IMDG****14.2 Proper Shipping Name**

Not regulated

**14.5 Marine Pollutant**

This material may meet the definition of a marine pollutant

**RID****14.2 Proper Shipping Name**

Not regulated

**ADR****14.2 Proper Shipping Name**

Not regulated

**IATA****14.2 Proper Shipping Name**

Not regulated

**Section 15: REGULATORY INFORMATION****15.1. Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture****National Regulations**

France

**Occupational Illnesses (R-463-3, France)**

Chemical name	French RG number	Title
Nickel 7440-02-0	RG 37ter	
Chromium 7440-47-3	RG 10	

**European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

**Authorisations and/or restrictions on use:**

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

**Persistent Organic Pollutants**

Not applicable

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009**

Not applicable

**International Inventories**

Component	TSCA	DSL/NDSL	EINECS/ELINCS	PICCS	ENCS	IECSC	AICS	KECL
-	X	X	X	X	X	X	X	X
-	X	X	X	X	X	X	X	X
-	X	X	X	X	X	X	X	X

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**15.2. Chemical Safety Assessment**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

**Section 16: OTHER INFORMATION****Full text of H-Statements referred to under section 3**

H317 - May cause an allergic skin reaction

H351 - Suspected of causing cancer

H372 - Causes damage to organs through prolonged or repeated exposure

**Legend**

SVHC: Substances of Very High Concern for Authorisation:

**Legend****Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA TWA (time-weighted average)

STEL

STEL (Short Term Exposure Limit)

Ceiling Maximum limit value

\*

Skin designation

**Classification Procedure**

Calculation method

**Issue Date:** 18-Sep-2007

**Revision Date:** 31-Aug-2020



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**Revision Note:** New format.

**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2015/830**

**Disclaimer**

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**End of Safety Data Sheet**