

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

1.1. Product Identifier

SDS # INTRA-001-EU
 Product Name Microlobal Nickel Fiber

Contains Nickel

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Recommended Use The manufacture of substances, composites, and nonwovens

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

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)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)

2.2. Label Elements

Product Identifier

Present
 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
 P405 - Store locked up
 P264 - Wash face, hands and any exposed skin thoroughly after handling
 P270 - Do not eat, drink or smoke when using this product
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P260 - Do not breathe dust/fume/gas/mist/vapours/spray
 P272 - Contaminated work clothing should not be allowed out of the workplace
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
 P363 - Wash contaminated clothing before reuse
 P308 + P313 - IF exposed or concerned: Get medical advice/attention
 P314 - Get medical advice/attention if you feel unwell
 P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations
 P273 - Avoid release to the environment
 P391 - Collect spillage

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	96-100	Skin Sens. 1 (H317) Carc. 2 (H351) STOT RE 1 (H372)	Not determined

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

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**

General Advice	Provide this SDS to medical personnel for treatment.
Eye Contact	Rinse immediately with plenty of water and seek medical advice.
Skin Contact	Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Inhalation	Remove to fresh air.
Ingestion	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. Causes damage to organs through prolonged or repeated exposure.

4.3. Indication of any Immediate Medical Attention and Special Treatment Needed

Notes to Physician Treat symptomatically.

Section 5: FIRE-FIGHTING MEASURES**5.1. Extinguishing Media****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

Not determined.

5.2. Special Hazards Arising from the Substance or Mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapours.

Hazardous Combustion Products NiCO.

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 Keep in suitable, closed containers for disposal.

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. Use personal protective equipment as required. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing and eye/face protection. 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

Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up.

7.3. Specific End Use(s)

Specific Use(s)

The manufacture of substances, composites, and nonwovens.

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 ³ TWA: 0.5 mg/m ³ Skin	TWA: 1 mg/m ³	TWA: 1 mg/m ³	TWA: 0.006 mg/m ³
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Nickel 7440-02-0	-	TWA: 1.5 mg/m ³	-	TWA: 0.01 mg/m ³ TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Nickel 7440-02-0	-	TWA: 0.5 mg/m ³	TWA: 0.25 mg/m ³	TWA: 0.05 mg/m ³ STEL: 0.15 mg/m ³	TWA: 0.5 mg/m ³ STEL: 1.5 mg/m ³

8.2. Exposure Controls

Engineering Controls

Apply technical measures to comply with the occupational exposure limits.

Personal Protective Equipment

Eye/Face Protection

If necessary, refer to appropriate regulations & standards.

Hand Protection

Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves.

Skin and Body Protection

Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

Respiratory Protection

Ensure adequate ventilation, especially in confined areas. In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical state	Solid	Odour	Odourless
Appearance	Silver/gray solid	Odour Threshold	Not determined
Colour	silver/gray		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting Point/Freezing Point	1453 °C / 2647 °F	
Boiling Point/Boiling Range	2732 °C / 4950 °F	
Flash Point	Not determined	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Non-flammable	
Flammability Limits in Air		
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapour Pressure	1 mmHg @1810°C (3290°F)	
Vapour Density	Not determined	
Relative Density	8.9 g/cm ³ @25°C (77°F)	
Water Solubility	Insoluble	
Solubility(ies)	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Very finely divided metal in the fully reduced state smolder in the presence of oxygen or air	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidising Properties	Not an oxidizer	

9.2. Other information

Softening Point	Magnetic Properties Ferromagnetic
------------------------	-----------------------------------

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reacts with acids to form hydrogen, and under certain circumstances it can form NiCO gas which is toxic.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of Hazardous Reactions

Possibility of Hazardous Reactions

None under normal processing.

10.4. Conditions to Avoid

Keep out of reach of children. Avoid contact with incompatible materials.

10.5. Incompatible Materials

Acids, oxidizing agents, sulfur compounds, oxygen, fluorine, and ammonia.

10.6. Hazardous Decomposition Products

NiCO.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity

Product Information

Inhalation	Do not inhale.
Eye Contact	Avoid contact with eyes.
Skin Contact	Avoid contact with skin.
Ingestion	Do not ingest.

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

ATEmix (oral) 6,594.00 mg/kg

Unknown Acute Toxicity

100% of the mixture consists of ingredient(s) of unknown toxicity.

0 % 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)		
Iron	= 984 mg/kg (Rat)		

Skin corrosion/irritation Not classified.

Serious eye damage/eye irritation Not classified.

Sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity Not classified.

Carcinogenicity May cause cancer.

Chemical Name	European Union
Nickel	Carc. 2

Reproductive toxicity Not classified.

STOT - single exposure Not classified.

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard 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	0.174 - 0.311: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 0.18: 72 h Pseudokirchneriella subcapitata mg/L EC50	100: 96 h Brachydanio rerio mg/L LC50 10.4: 96 h Cyprinus carpio mg/L LC50 static 1.3: 96 h Cyprinus carpio mg/L LC50 semi-static	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

Not determined.

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

Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances

IMDG

14.2 Proper Shipping Name

Please contact manufacturer for shipping information

RID

14.2 Proper Shipping Name

Please contact manufacturer for shipping information

ADR

14.2 Proper Shipping Name

Please contact manufacturer for shipping information

IATA

14.2 Proper Shipping Name

Please contact manufacturer for shipping information

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	

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 does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances 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
Nickel 7440-02-0 (96-100)	X	X	X	X	-	X	X	Present

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 if inhaled

H372 - Causes damage to organs through prolonged or repeated exposure if inhaled

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**Classification Procedure**

Calculation method

Issue Date: 24-Aug-2016**Revision Date:** 06-Jan-2017**Revision Note:** New format.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006, as amended by Regulation (EU) No. 453/2010

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet