

# Safety Data Sheet

Issue Date: 24-Aug-2016

Revision Date: 26-Aug-2016

Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Microlobal™ Nickel Fiber

### Other means of identification

**SDS #** INTRA-001

### Recommended use of the chemical and restrictions on use

**Recommended Use** The manufacture of substances, composites, and nonwovens.

### Details of the supplier of the safety data sheet

#### **Supplier Address**

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

#### **Emergency Telephone Number**

**Company Phone Number** INFOTRAC 1-352-323-3500  
**Emergency Telephone (24 hr)** 1-800-535-5053 North America

## 2. HAZARDS IDENTIFICATION

**Appearance** Silver/gray solid

**Physical state** Solid

**Odor** Odorless

### Classification

Skin sensitization	Category 1
Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1

### Signal Word

**Danger**

### Hazard statements

May cause an allergic skin reaction  
May cause cancer  
Causes damage to organs through prolonged or repeated exposure



### Precautionary Statements - Prevention

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  
Do not breathe dust/fume/gas/mist/vapors/spray  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product

**Precautionary Statements - Response**

If exposed or concerned: Get medical advice/attention  
 IF ON SKIN: Wash with plenty of soap and water  
 If skin irritation or rash occurs: Get medical advice/attention  
 Wash contaminated clothing before reuse

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other hazards**

Very toxic to aquatic life with long lasting effects

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Nickel	7440-02-0	96-100
Iron	7439-89-6	0-4

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

### 4. FIRST AID MEASURES

**First Aid Measures**

<b>General Advice</b>	Provide this SDS to medical personnel for treatment.
<b>Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin Contact</b>	Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
<b>Inhalation</b>	Remove to fresh air.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water.

**Most important symptoms and effects**

<b>Symptoms</b>	May cause an allergic skin reaction. Causes damage to organs through prolonged or repeated exposure.
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically.
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### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

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

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Not determined.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Use personal protective equipment as required.

**Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

**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.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. 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/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.

**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.

**Incompatible Materials** acids, oxidizing agents, sulfur compounds, oxygen, fluorine, and ammonia

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Nickel 7440-02-0	TWA: 1.5 mg/m <sup>3</sup> inhalable fraction	TWA: 1 mg/m <sup>3</sup> (vacated) TWA: 1 mg/m <sup>3</sup>	IDLH: 10 mg/m <sup>3</sup> IDLH: 10 mg/m <sup>3</sup> Ni TWA: 0.015 mg/m <sup>3</sup> TWA: 0.015 mg/m <sup>3</sup> except Nickel carbonyl Ni

**Appropriate engineering controls**

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits.

**Individual protection measures, such as personal protective equipment**

- Eye/Face Protection** Refer to 29 CFR 1910.133 for eye and face protection regulations.
- Skin and Body Protection** Refer to 29 CFR 1910.138 for appropriate skin and body protection.
- Respiratory Protection** Refer to 29 CFR 1910.134 for respiratory protection requirements.
- General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical state</b>	Solid	<b>Odor</b>	Odorless
<b>Appearance</b>	Silver/gray solid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	silver/gray		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	Not determined	
<b>Melting Point/Freezing Point</b>	1453 °C / 2647 °F	
<b>Boiling Point/Boiling Range</b>	2732 °C / 4950 °F	
<b>Flash Point</b>	Not determined	
<b>Evaporation Rate</b>	Not determined	
<b>Flammability (Solid, Gas)</b>	Non-flammable	
<b>Flammability Limits in Air</b>		
<b>Upper Flammability Limits</b>	Not determined	
<b>Lower Flammability Limit</b>	Not determined	
<b>Vapor Pressure</b>	1 mmHg @1810°C (3290°F)	
<b>Vapor Density</b>	Not determined	
<b>Relative Density</b>	8.9 g/cm3 @25°C (77°F)	
<b>Water Solubility</b>	Insoluble	
<b>Solubility in other solvents</b>	Not determined	
<b>Partition Coefficient</b>	Not determined	
<b>Auto-ignition Temperature</b>	Very finely divided metal in the fully reduced state smolder in the presence of oxygen or air	
<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>Oxidizing Properties</b>	Not an oxidizer	

**Other Information**  
**Magnetic Properties** Ferromagnetic

**10. STABILITY AND REACTIVITY**

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

**Chemical Stability**  
 Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**  
 None under normal processing.

**Conditions to Avoid**  
 Keep out of reach of children. Incompatible materials.



**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Nickel 7440-02-0	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 100: 96 h Brachydanio rerio mg/L LC50 10.4: 96 h Cyprinus carpio mg/L LC50 static	1: 48 h Daphnia magna mg/L EC50 Static 100: 48 h Daphnia magna mg/L EC50
Iron 7439-89-6		13.6: 96 h Morone saxatilis mg/L LC50 static	

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Not determined

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS**

**Waste Treatment Methods**

**Disposal of Wastes**

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

**Contaminated Packaging**

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

**US EPA Waste Number**

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Nickel 7440-02-0		Included in waste streams: F006, F039		

**California Hazardous Waste Status**

Chemical Name	California Hazardous Waste Status
Nickel 7440-02-0	Toxic powder Ignitable powder

**14. TRANSPORT INFORMATION**

**Note**

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

**DOT**

Please contact manufacturer for most current information

**IATA**

Please contact manufacturer for most current information

**IMDG**

Please contact manufacturer for most current information

**15. REGULATORY INFORMATION**

**International Inventories**

Chemical Name	TSCA	DSL/NDSL	EINECS/E LINCS	ENCS	IECSC	KECL	PICCS	AICS
Nickel	X	X	X		X	Present	X	X
Iron	X	X	X		X	Present	X	X

**Legend:**

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*
- AICS - Australian Inventory of Chemical Substances*

**US Federal Regulations**

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Nickel 7440-02-0	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Nickel - 7440-02-0	7440-02-0	96-100	0.1

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Nickel		X	X	

**US State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Nickel - 7440-02-0	Carcinogen

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Nickel 7440-02-0	X	X	X

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	Not determined	Not determined	Not determined	Not determined
<b><u>HMIS</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical hazards</b>	<b>Personal Protection</b>
	Not determined	Not determined	Not determined	Not determined

**Issue Date:** 24-Aug-2016  
**Revision Date:** 26-Aug-2016  
**Revision Note:** New format

**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**