

Cambridge Isotope Laboratories, Inc. 50 Frontage Road Andover, MA 01810

## **MATERIAL SAFETY DATA SHEET**

## 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Description NICKEL-61 METAL (61Ni)

Cambridge Isotope Laboratories, Inc. 50 Frontage Rd ANDOVER, MA 01810 USA

E-mail cilsales@isotope.com Web Site www.isotope.com

**Phone Numbers** 

**Emergency Contact** Chemtrec

Emergency Phone 1-800-424-9300 (24 hours)

**Customer Service** 

1-800-322-1174 (8:30-5:30 EST)

Phone

Transportation 1-202-483-7616 (24 hours)

## 2 HAZARDS IDENTIFICATION

### **OSHA Hazards**

Flammable solid, Target Organ Effect, Skin sesitizer, Carcinogen

**Target Organs** 

Lungs

### **GHS Label Information**

Signal Word Danger

Hazards Identification

Flame

Health hazard Exclamation mark Environment

## Hazard Statement(s)

Flammable solid.

May cause an allergic skin reaction.

Suspected of causing cancer.

Causes damage to organs through prolonged or repeated exposure.

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## **MATERIAL SAFETY DATA SHEET**

Very toxic to aquatic life.

## Precautionary Statement(s)

Keep away from heat/sparks/open flames/hot surfaces- No smoking.

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

Get medical advice/attention if you feel unwell.

## **HMIS Ratings**

Chronic Health Physical 3 Flammability 0 2 Health

### NFPA Codes

Fire 0 Health 2 3 Reactivity

### Potential Health Effects

Eyes Contact may cause eye irritation. Ingestion May be harmful if swallowed.

May be harmful if inhaled. May cause respiratory tract irritation. Inhalation Skin May be harmful if absorbed through skin. May cause skin irritation.

#### **COMPOSITION / INFORMATION ON INGREDIENTS** 3

## Composition / Information on Ingredients

Chemical Formula Ni Molecular Weight 60.82 CAS No. 14928-10-0 EC No. 231-111-4 028-002-01-4 Index No.

## **FIRST AID MEASURES**

## First Aid Measures

Eyes Flush eyes with water as a precaution.

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth Ingestion

with water. Consult a physician.

Inhalation If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a

physician.

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# **MATERIAL SAFETY DATA SHEET**

Skin Wash with soap and plenty of water. Consult a physician.

Additional Information Move out of dangerous area. Consult a physician and show this safety data sheet.

#### FIRE FIGHTING MEASURE 5

Fire Fighting Measures

Extinguishing Media Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

Fire Fighting Equipment

Wear self contained breathing apparatus for fire fighting if necessary.

#### **ACCIDENTAL RELEASE MEASURES** 6

### Accidental Release Measures

Personal Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas.

**Precautions** Ensure adequate ventilation. Avoid breathing dust.

Environmental Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Precautions** 

Sweep up and shovel. Keep in suitable, closed containers for disposal.

Methods and materials for containment and

cleanup

#### HANDLING AND STORAGE 7

Precautions for Safe Handling

Handling Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of

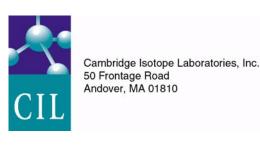
ignition - No smoking. Take measures to prevent build up of electrostatic charge.

Conditions for Safe Storage

Storage Store at room temperature away from light and moisture.

#### 8 **EXPOSURE CONTROL / PERSONAL PROTECTION**

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)



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## **MATERIAL SAFETY DATA SHEET**

CHEMICAL NAME OSHA PEL **ACGIH TLV NICKEL** TWA  $1 \text{ mg/M}^3$ 1.5 mg/M<sup>3</sup>

Personal Protecton

Eyes - Face Wear safety glasses with side shields (or goggles) and a face shield.

Skin Choose body protection according to the amount and concentration of the dangerous substance at

the work place.

Respiratory When appropriate, use NIOSH/CEN approved respirator.

**Protective Clothing** Wear suitable protective clothing and gloves.

Work Hygienic Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks

**Practices** and at the end of workday.

#### 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties (Unlabeled Compound)

Form Powder

Color White, silver, metallic

No data available рΗ Melting Point 1,453 °C (2,647 °F) - lit 2,732 °C (4,950 °F) - lit **Boiling Point** 

Flashpoint Not applicable

Fammability The substance or mixture is a flammable solid with the subcategory 2

Lower Explosion No data available

Limit

No data available Upper Explosion

Limit

Vapor Pressure 1 hPa (1 mmHg) at 1,810 °C (3,290 °F)

Density 8.9 g/cm3 at 25 °C (77 °F)

insoluble Solubility in Water

Auto Ignition No data available

Temperature

#### STABILITY AND REACTIVITY 10

Stability and Reactivity

**Chemical Stability** Stable if stored under recommended conditions.

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## **MATERIAL SAFETY DATA SHEET**

Conditions to Avoid Heat, flames and sparks. Extremes of temperature and direct sunlight.

Hazardous decomposition

products

Formed under fire conditions: Nickel/Nickel oxides

Materials to avoid

Acids, Oxidizing agents, Sulphur compounds, Hydrogen gas, Oxygen, Methanol

Additional

Materials to avoid: Organic solvents, Aluminum, Fluorine, Ammonia

Information

#### 11 TOXICOLOGICAL INFORMATION

**Acute Toxicity** 

Serious No data available

Damage/Eye Irritation

Skin No data available

Corrosion/Irritation

Inhalation No data available

Respiratory or Skin Sensitization

May cause allergic skin reaction.

Germ Cell

Mutagenicity

Not available

Carcinogenicity

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification. Limited evidence of carcinogenicity in

animal studies.

**IARC** 2B- Group 2B: Possibly carcinogenic to humans.

No component of this product present at levels greater than or equal to 0.1% is identifiable as a **ACGIH** 

carcinogen or potential carcinogen by ACGIH.

NTP Reasonably anticipated to be a human carcinogen.

**OSHA** No component of this product present at levels greater than or equal to 0.1 % is identified as a

carcinogen or potential carcinogen by OSHA.

Reproductive

**Toxicity** 

Not available

Specific Target Organ Toxicity

Single Exposure No data available

Repeated Exposure Inhalation - Causes damage to organs through prolonged or repeated exposure



## **MATERIAL SAFETY DATA SHEET**

Signs and Symptoms of Exposure

The chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12 ECOLOGICAL INFORMATION

**Toxicity** 

Toxicity to Fish

LC50

Cyprinus carpio (Carp) - 1.3 mg/l - 96 h

Daphnia magna (Water flea) - 1 mg/l - 48 h

Toxicity to Daphnia

and Other Aquatic

Invertebrates EC50 Persistance and

Not available

Degradability
Bioaccumulative

Potential

Not available

Mobility in Soil Not available

PBT and vPvB

Assessment

Not available

Other Adverse

- r

Effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic organisms.

## 13 DISPOSAL CONSIDERATIONS

**Disposal Considerations** 

Product Disposal Waste materials should be disposed of under conditions which meet Federal, State, and Local

environmental control regulations.

## 14 TRANSPORT INFORMATION

Transportation Information-DOT/IATA/IMDG

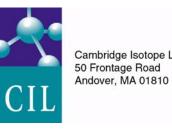
UN Number 3089

Prop. Ship. Name Metal powders, flammable, n.o.s., (Nickel, powder [particle diameter < 1 mm])

Hazard Class 4.1
Packing Group II
Reportable Quantity 100 lbs

(RQ) DOT US

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Cambridge Isotope Laboratories, Inc.

## **MATERIAL SAFETY DATA SHEET**

Marine Pollutant

No

Poison Inhalation

No

Hazard

#### 15 **REGULATORY INFORMATION**

## Regulatory Information

Flammable solid, Target Organ Effect, Skin sesitizer, Carcinogen

SARA

Sara 302 No chemicals in this material are subject to the reporting requirements.

Component

Sara 313 Yes

Component

SARA 311/312 Hazards

Fire (Y/N) Υ

Acute (Y/N) Υ

Chronic (Y/N) Υ

### STATE REGULATIONS

Massachusetts

Yes

Right to Know

Pennsylvania Right

Yes

to Know

New Jersey Right

Yes

to Know

California

WARNING! This product contains a chemical known by the state of California to cause cancer.

Proposition 65

Canada

**DSL Status** 

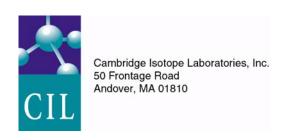
All components are on the Canadian DSL list.

ΕU

Flammable. Dangerous for the environment. Hazard

## Safety Statements

Keep away from sources of ignition - No smoking. Wear suitable protective clothing and gloves.



## **MATERIAL SAFETY DATA SHEET**

**Risk Statements** 

Flammable.

Limited evidence of a carcinogenic effect.

May cause sensitisation by skin contact.

## 16 OTHER INFORMATION

Additional MSDS Information

This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled

compounds are generally not available, but are assumed to be similar or identical to the

corresponding unlabeled compound.

Approved On

03/03/11

Version Number

1