

CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Description NICKEL-58 METAL (58Ni)

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

Phone

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

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.

Page 1 of 8

Page 2 of 8





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

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 57.95 CAS No. 13981-79-8 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.

Page 3 of 8

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)





CHEMICAL NAME OSHA PEL **ACGIH TLV NICKEL** TWA 1 mg/M^3 1.5 mg/M³

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.

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

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 **Boiling Point** 2,732 °C (4,950 °F) - lit

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)

Solubility in Water insoluble

No data available Auto Ignition

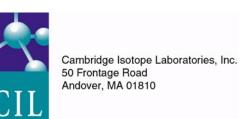
Temperature

10 STABILITY AND REACTIVITY

Stability and Reactivity

Chemical Stability Stable if stored under recommended conditions.

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



Page 5 of 8

MATERIAL SAFETY DATA SHEET

Hazardous decomposition products

Formed under fire conditions: Nickel/Nickel oxides

Materials to avoid Additional

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

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

Information

TOXICOLOGICAL INFORMATION 11

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.

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

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

Signs and Symptoms of Exposure

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

ECOLOGICAL INFORMATION 12

Toxicity

Toxicity to Fish

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

LC50

Toxicity to Daphnia and Other Aquatic

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

Invertebrates EC50

Persistance and

Not available

Degradability

Bioaccumulative

Potential

Not available

Mobility in Soil

Not available

PBT and vPvB

Assessment

Not available

Other Adverse

Effects

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

Very toxic to aquatic organisms.

DISPOSAL CONSIDERATIONS 13

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

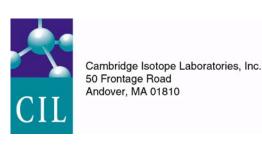
Prop. Ship. Name Metal powders, flammable, n.o.s., (Nickel, powder [particle diameter < 1 mm])

Hazard Class 4.1 **Packing Group** Ш Reportable Quantity 100 lbs

(RQ) DOT US

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) Y

Acute (Y/N) Y

Chronic (Y/N) Y

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.

EU

Hazard Flammable. Dangerous for the environment.

Safety Statements

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

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 Version Number 03/03/11

1