DATE OF LAST REVISION: 07/01/15

Section 1: Identification

Product Name: Nickel iron

Company: Angstrom Sciences, Inc.

40 South Linden Street
Duquesne, PA 15110
For more information call: 412-469-8466

(Monday - Friday 9:00 AM -5:00 PM EST)

Section 2: HAZARD IDENTIFICATION





Hazard Statements: H228: Flammable solid

H317: May cause allergic skin reaction H351: Suspected of causing cancer

H372: Causes damage to organs through prolonged or repeated exposure

H319: Causes serious eye irritationH335: May cause respiratory irritation

Precautionary Statements: P210: Keep away from sparks/heat. No smoking

P280: Wear protective gloves/protective clothing/eye protection/face

protection

P260: Do not breathe dust/fume/gas/mist/vapors/spray

P305 + P351 + P338: If In Eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - Continue

rinsing

P363: Wash contaminated clothing before reuse

P405: Store locked up

P501: Dispose of contents/container in accordance with local/regional/

national/international regulations

HMIS Health Ratings (0-4):

	Powder	Bulk
Health:	2	0
Flammability:	2	0
Physical:	1	0

Section 3: Composition/Information on Ingredients

Chemical characterization: Metal Alloy

Nickel (Ni):

CAS# Description: 7440-02-0

Percentage: 0-100 wt% **EC number:** 231-157-5

Iron (Fe):

CAS# Description: 7439-89-6

Percentage: 0-100 wt% EC number: 231-096-4

Section 4: FIRST AID MEASURES

General Treatment: Seek medical attention if symptoms persist.

Special Treatment: None
Important Symptoms: None

Eye Contact: Flush eyes with water, blinking often for several minutes. Remove contact lenses if

present and easy to do. Continue rinsing.

Skin Contact: Wash affected area with mild soap and water. Remove any contaminated clothing.

Inhalation: Remove to fresh air. Supply oxygen if breathing is difficult.

Ingestion: Seek medical attention.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing Media: Do not use water for metal fires. Use special powder, sand, CO2

Flammability: Non-flammable, except as powder

Special Fire Fighting Procedure: Use full-face, self contained breathing apparatus with full protective clothing to prevent contact with skin and eyes.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.

Environmental Precautions: Isolate runoff to prevent environmental pollution.

NICKEL IRON

SAFETY DATA SHEET

Section 7: HANDLING AND STORAGE

Handling Precautions for safe handling: Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities Store in a cool dry place in a tightly sealed container.

Work/Hygienic Maintenance: Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.

Ventilation: Provide sufficient ventilation to maintain concentration at or below threshold limit.

Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Permissible Exposure Limits: 1 mg/m³ as Nii, Long-term value **Threshold Limit Value:** 1.5 mg/m³ as Ni, long-term value

Special Equipment: None

Respiratory Protection: Use a respirator with type P100 (USA) or P3 (EN143) cartridges

as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate.

Only use equipment tested and approved under appropriate

government standards.

Protective Gloves: Butyl Rubber gloves

Eye Protection: Safety glasses or goggles

Body Protection: Protective work clothing. Wear close-toed shoes and long sleeves/pants.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Form: Powder, Sputtering target

Color: Silver Odor: Odorless Water Solubility: Insoluble **Boiling Point:** N/A Melting Point: N/A Flash Point: N/A Autoignition Temperature: N/A Density: N/A Molecular Weight: N/A

Section 10: STABILITY AND REACTIVITY

Reactivity: Oxidizing Agents.

Chemical Stability: Stable under recommended storage conditions

Incompatible Conditions: Protect against electrostatic charges

Hazardous Decomposition Products: Metal oxide fume

Section 11: TOXICOLOGICAL INFORMATION

Potential Health Effects:
Eyes: May cause irritation

Skin: May cause irritation

Ingestion: May cause irritation

Inhalation: May cause irritation

Chronic: N/A

Signs & Symptoms: N/A
Aggravated Medical Conditions: N/A
Median Lethal Dose: N/A

Carcinogen: IARC-2B: Possibly carcinogenic to humans: limited evidence in human in the

absence of sufficient evidence in experimental animals.

EPA-A: human carcinogen: sufficient evidence from epidemiologic studies to

support a causal association between exposure and cancer

NTP-K: Known to be carcinogenic: sufficient evidence from human studies

Section 12: ECOLOGICAL INFORMATION

Aquatic Toxicity: High

Persistent Bioaccumulation Toxicity: No

Very Persistent, Very Bioaccumulative: No

Notes: May cause long lasting harmful effect on aquatic life.

Do not allow product to reach any water sources.

Danger to drinking water if even extremely small quantities leak

Hazardous as powder only

into the ground.

Avoid transfer into the environment.

Toxic to aquatic life.

Section 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, national, and international regulations

Hazardous:

Section 14: TRANSPORT INFORMATION



Hazard Class: 4.1 Flammable solids, self-reactive substances and solid desensitized explosives

Packing Group:

UN Number: UN3089

Proper Shipping Name: Metal powders, flammable, n.o.s. (Nickel iron)

Section 15: REGULATORY INFORMATION
Sec 302 Extremely Hazardous: No

Sec 304 Reportable Quantities: N/A

Sec 313 Toxic Chemicals: Components

Section 16: OTHER INFORMATION

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.