

# SAFETY DATA SHEET

Date Printed: 04/23/2024

Date Revised: 01/15/2022

## SECTION 1. IDENTIFICATION

**Product Identifier:** (4N) 99.99% Nickel(IV) Sulfide

**Product Code:** NI4-S-04-C

**CAS Number:** 12035-51-7

**Relevant identified uses of the substance:** Scientific research and development

Supplier details:

American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351  
Emergency telephone number:  
+1 800-424-9300

## SECTION 2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Sensitization Category 1

Germ Cell Mutagenicity Category 2

Carcinogenicity Category 1A

Specific target organ toxicity - (repeated exposure) Category 1

Label Elements

Signal Word

Danger

Hazard Statements

May cause an allergic skin reaction

Suspected of causing genetic defects

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 should 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  
Response  
IF exposed or concerned: Get medical attention/advice  
Skin  
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  
Storage  
Store locked up  
Disposal  
Dispose of contents/container to an approved waste disposal plant  
Hazards not otherwise classified (HNOC)  
Very toxic to aquatic life with long lasting effects

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

Component: Nickel disulfide  
CAS-No: 12035-51-7  
Weight %: <=100

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### **SECTION 4. FIRST AID MEASURES**

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.  
Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.  
Inhalation Move to fresh air. Get medical attention immediately if symptoms occur.  
Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.  
Most important symptoms and effects  
May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing  
Notes to Physician Treat symptomatically

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### **SECTION 5. FIREFIGHTING MEASURES**

Unsuitable Extinguishing Media No information available  
Flash Point No information available  
Method - No information available  
Autoignition Temperature No information available  
Explosion Limits  
Upper No data available

Lower No data available

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous Combustion Products

Sulfur oxides Nickel oxides.

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.

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal Precautions Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.

Environmental Precautions Do not flush into surface water or sanitary sewer system. Do not allow material to

contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

Methods for Containment and Clean

Up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

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## **SECTION 7. HANDLING AND STORAGE**

Handling Wear personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid dust formation. Use caution when opening.

Storage Keep away from oxidizing agents. Keep tightly closed in a dry and cool place. Store locked up.

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures None under normal use conditions.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection

No protective equipment is needed under normal use conditions.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Powder  
Appearance No information available  
Odor No information available  
Odor Threshold No information available  
pH No information available  
Melting Point/Range No data available  
Boiling Point/Range No information available  
Flash Point No information available  
Evaporation Rate No information available  
Flammability (solid,gas) No information available  
Flammability or explosive limits  
Upper No data available  
Lower No data available  
Vapor Pressure No information available  
Vapor Density No information available  
Specific Gravity No information available  
Solubility No information available  
Partition coefficient; n-octanol/water No data available  
Autoignition Temperature No information available  
Decomposition Temperature No information available  
Viscosity No information available

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## SECTION 10. STABILITY AND REACTIVITY

Reactive Hazard None known, based on information available  
Stability Stable under normal conditions.  
Conditions to Avoid Incompatible products.  
Incompatible Materials Oxidizing agents  
Hazardous Decomposition Products Sulfur oxides, Nickel oxides  
Hazardous Polymerization Hazardous polymerization does not occur.  
Hazardous Reactions Reacts with strong oxidising agents.

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## SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity  
Product Information  
Component Information  
Toxicologically Synergistic  
Products  
No information available  
Delayed and immediate effects as well as chronic effects from short and long-term exposure  
Irritation No information available  
Sensitization No information available  
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.  
Mutagenic Effects No information available  
Reproductive Effects No information available.  
Developmental Effects No information available.  
Teratogenicity No information available.  
STOT - single exposure None known

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and delayed

Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

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## **SECTION 12. ECOLOGICAL INFORMATION**

Ecotoxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following

substances which are hazardous for the environment.

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available.

Mobility No information available.

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

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## **SECTION 14. TRANSPORT INFORMATION**

DOT

UN-No UN3077

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Hazard Class 9

Packing Group III

TDG

UN-No UN3077

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Hazard Class 9

Packing Group III

IATA

UN-No UN3077

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Hazard Class 9

Packing Group III

IMDG/IMO

UN-No UN3077

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Hazard Class 9

Packing Group III

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## SECTION 15. REGULATORY INFORMATION

U.S. Federal Regulations  
TSCA 12(b) Not applicable  
SARA 313 Not applicable  
SARA 311/312 Hazard Categories See section 2 for more information  
CWA (Clean Water Act) Not applicable  
Clean Air Act Not applicable  
OSHA Occupational Safety and Health Administration  
Not applicable  
CERCLA Not applicable  
California Proposition 65 This product does not contain any Proposition 65 chemicals  
U.S. Department of Transportation  
Reportable Quantity (RQ): N  
DOT Marine Pollutant N  
DOT Severe Marine Pollutant N  
U.S. Department of Homeland Security  
This product does not contain any DHS chemicals.  
Other International Regulations  
Mexico - Grade No information available

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## 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.