SAFETY DATA SHEET

Date Printed: 03/28/2024
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SECTION 1. IDENTIFICATION

Product Identifier: (5N) 99.999% Nickel(IV) Sulfide

Product Code: NI4-S-05-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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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

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

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.

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.

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.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limitsestablished 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.

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

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.

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.

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.

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.

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

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.