

SAFETY DATA SHEET

Date Printed: 05/27/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifier: >97% Nickel Diethyldithiocarbamate

Product Code: NI-NSCH-017-C

CAS Number: 14267-17-5

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

OSHA Haz Com: CFR 1910.1200: Sensitization - Respiratory [Category 1]

Sensitization - Skin [Category 1]

Carcinogenicity [Category 1A]

Specific Target Organ Toxicity (Repeated Exposure) [Category 1]

Signal word: Danger!

Hazard Statement(s): May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

May cause cancer

Causes damage to organs: Respiratory System through prolonged or repeated exposure.

Pictogram(s) or Symbol(s):

Precautionary Statement(s):

[Prevention] Avoid breathing dusts or mists. In case of inadequate ventilation wear respiratory protection. Contaminated

work clothing must not be allowed out of the workplace. Wear protective gloves. Obtain special instructions

before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection and face protection. Do not breathe dusts or mists. Wash hands

and face thoroughly after handling. Do not eat, drink or smoke when using this product.

[Response] If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If

experiencing respiratory symptoms: Call a poison center or doctor. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse. If exposed or concerned: Get medical advice or attention. Get medical advice or attention if you feel unwell. [Storage] Store locked up. [Disposal] Dispose of contents and container in accordance with US EPA guidelines for the classification and determination of hazardous waste listed in 40 CFR 261.3. (See Section 13)

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Substance
Chemical Formula: $C_{10}H_{20}N_2NiS_4$
Synonyms: Diethyldithiocarbamic Acid Nickel Salt

SECTION 4. FIRST AID MEASURES

Inhalation: May cause coughing, difficult breathing and nausea. Call a poison center or doctor if you feel unwell.

Effects of exposure (inhalation) to substance may be delayed. Inhalation of vapors or contact with substance will result in contamination and potential harmful effects. Move victim to fresh air. Give artificial

respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet.

Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Skin contact: Call a poison center or doctor if you feel unwell. Effects of exposure (skin contact) to substance may be

delayed. Remove and wash contaminated clothing before re-use. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively.

Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Eye contact: In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye

irritation persists get medical advice/attention. Move victim to fresh air. Check for and remove any contact

lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take

precautions to protect themselves.

Ingestion: Effects of exposure (ingestion) to substance may be delayed. If swallowed, seek medical advice

immediately and show the container or label. Do not use mouth-to-mouth method if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other

proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a person

vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth.

Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Symptoms/effects:

Acute: No data available

Delayed: May cause skin sensitization. Possibly carcinogenic to humans.

Immediate medical attention: CAUTION: Victim may be a source of contamination. If breathing has stopped, perform artificial respiration.

Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the

material(s) involved and take precautions to protect themselves.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media: Dry chemical, CO₂, water spray, or alcohol-resistant foam. Consult with local fire authorities before

attempting large scale fire fighting operations.

Specific hazards arising from the chemical

Hazardous combustion products: These products include: Carbon oxides Nitrogen oxides Silicates Metallic oxides

Other specific hazards: Closed containers may explode from heat of a fire.

Special precautions for fire-fighters:

Use water spray or fog; do not use straight streams. Dike fire-control water for later disposal; do not scatter the material. Containers may explode when

heated. Move containers from fire area if you can do it without risk.

Special protective equipment for fire-fighters:

Wear positive pressure self-contained breathing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations

ONLY; it may not be effective in spill situations. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Do not touch

damaged containers or spilled material unless wearing appropriate protective clothing (Section 8).

Warn

unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation.

Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Personal protective equipment: Splash goggles. Wear protective clothing (chemical resistant suit and chemical resistant boots). Dust

respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).

Emergency procedures: Prevent dust cloud. Do not clean-up or dispose except under supervision of a specialist. In case of a spill

and/or a leak, always shut off any sources of ignition, ventilate the area, and exercise caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed.

Methods and materials for containment and cleaning up:

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if without risk. Ventilate the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material.

Environmental precautions:

Keep away from living quarters. Do not let product enter drains. Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling: Avoid inhalation of vapor or mist. Manipulate under an adequate fume hood. Avoid contact with skin and eyes. Avoid exposure - obtain special instructions before use. Avoid prolonged or repeated exposure.

Normal measures for preventive fire protection. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke. Keep away from sources of ignition.

Conditions for safe storage: Store locked up. Keep containers tightly closed in a cool, well-ventilated place. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods. Storage incompatibilities: Store away from oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: No data available

Appropriate engineering controls:

Handle only in a fully enclosed system and equipment. Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

Personal protective equipment

Respiratory protection: Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.

Hand protection: Wear protective gloves.

Eye protection: Safety glasses.

Skin and body protection: Wear protective clothing (chemical resistant suit and chemical resistant boots).

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Solid

Form: Crystal - Powder

Color: Deep yellow green - Deep green

Odor: No data available

Odor threshold: No data available

Solubility(ies):

Soluble: Pyridine

Dynamic Viscosity: No data available
Kinematic Viscosity: No data available
pH: No data available
Partition coefficient:
n-octanol/water (log Pow)
No data available
Evaporation rate:
(Butyl Acetate = 1)
No data available
Boiling point/range: No data available
Flash point: 267°C (513°F)
Vapor pressure:
Autoignition temperature: No data available
No data available
Flammability (solid, gas): No data available Flammability or explosive limits:
Decomposition temperature: No data available
Lower: No data available
Vapor density:
Upper: No data available
No data available
Melting point/freezing point:
Relative density: No data available
No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not Available.
Chemical Stability: Stable under recommended storage conditions. (See Section 7)
Possibility of Hazardous Reactions: No hazardous reactivity has been reported.
Conditions to avoid: Avoid excessive heat and light.
Incompatible materials: Oxidizing agents
Hazardous Decomposition Products: No data available

SECTION 11. TOXICOLOGICAL INFORMATION

Respiratory or skin sensitization:
No data available
Carcinogenicity:
Routes of Exposure: Inhalation, Eye contact, Ingestion, Skin contact.
Symptoms related to exposure:
Inhalation causes irritation of the lungs and respiratory system. Skin contact may result in sensitization. Readily absorbed through skin.
Potential Health Effects:
No specific information available; skin and eye contact may result in irritation. May be harmful if inhaled or ingested.
Target organ(s):
Causes damage to organs: Respiratory System through prolonged or repeated exposure.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Fish: No data available

Crustacea: No data available

Algae: No data available

Persistence and degradability: No data available

Bioaccumulative potential (BCF): No data available

Mobility in soil: No data available

Partition coefficient:

n-octanol/water (log Pow)

No data available

Soil adsorption (Koc): No data available

Henry's Law:

constant (PaM³/mol)

No data available

Nickel Diethyldithiocarbamate

Skin corrosion/irritation:

No data available

Germ cell mutagenicity:

No data available

Acute Toxicity:

No data available

No data available

Serious eye damage/irritation:

No data available

IARC: Group 1 (Carcinogenic to humans).

NTP: a (Known to be carcinogens). OSHA: No data available

Reproductive toxicity:

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal of product: Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local

rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a

chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide

assistance but does not replace these laws, nor does compliance in accordance with this section ensure

regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous

Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.

Disposal of container: Dispose of as unused product. Do not re-use empty containers.

Other considerations: Observe all federal, state and local regulations when disposing of the substance.

SECTION 14. TRANSPORT INFORMATION

DOT (US) Non-hazardous for transportation.
IATA Non-hazardous for transportation.
IMDG Non-hazardous for transportation.

SECTION 15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):
This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.
US Federal Regulations
CERCLA Hazardous substance and Reportable Quantity:
SARA 313: Not Listed
SARA 302: Not Listed
State Regulations
State Right-to-Know
Massachusetts Not Listed
New Jersey Not Listed
Pennsylvania Not Listed
California Proposition 65: Not Listed
Other Information
International Inventories
WHMIS hazard class: D2B: Materials causing other toxic effects. (Toxic)
Canada: NDSL On NDSL
EC-No: 238-157-4

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.