

# SAFETY DATA SHEET

Date Printed: 05/05/2024

Date Revised: 01/15/2022

## SECTION 1. IDENTIFICATION

**Product Identifier:** (5N) 99.999% Nickel(II) Acetate Tetrahydrate

**Product Code:** NI2-AC-05-P.4HYD

**CAS Number:** 6018-89-9

**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

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 4), H302

Respiratory sensitisation (Category 1), H334

Carcinogenicity (Category 1B), H350

2.2 GHS Label elements, including precautionary statements



Pictogram

Signal word Danger

Hazard statement(s)

H302 Harmful if swallowed.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H350 May cause cancer.

Precautionary statement(s)

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing dust/ fume/ gas/ mist/ Vapors/ spray.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P281 Use personal protective equipment as required.  
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.  
P304 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
P330 Rinse mouth.  
P405 Store locked up.  
P501 Dispose of contents/ container to an approved waste disposal plant.  
2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

---

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

### **3.1 Substances**

Synonyms : Acetic acid

Formula : C<sub>4</sub>H<sub>6</sub>NiO<sub>4</sub> 4H<sub>2</sub>O

Molecular weight : 248.84 g/mol

CAS-No. : 6018-89-9

EC-No. : 206-761-7

Hazardous components

Component Classification Concentration

Nickel di(acetate)

Acute Tox. 4; Skin Sens. 1;

Carc. 1B; H302, H317, H350

<= 100 %

---

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

### **4.1 Description of first aid measures**

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### **4.2 Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### **4.3 Indication of any immediate medical attention and special treatment needed**

No data available

---

## **SECTION 5. FIREFIGHTING MEASURES**

### **5.1 Extinguishing media**

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### **5.2 Special hazards arising from the substance or mixture**

Carbon oxides, Nickel/nickel oxides

### **5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

### **5.4 Further information**

No data available

---

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

### **6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing Vapors, mist or gas. Ensure adequate

ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### **6.3 Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### **6.4 Reference to other sections**

For disposal see section 13.

---

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

### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

### **7.2 Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place.

### **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

---

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

### **8.1 Control parameters**

Components with workplace control parameters

Component CAS-No. Value Control parameters

Basis

Nickel di(acetate) 6018-89-9 TWA 1.000000  
mg/m<sup>3</sup>

USA. Occupational Exposure Limits  
(OSHA) - Table Z-1 Limits for Air  
Contaminants  
TWA 1.000000  
mg/m<sup>3</sup>

USA. Occupational Exposure Limits  
(OSHA) - Table Z-1 Limits for Air  
Contaminants  
TWA 0.015000  
mg/m<sup>3</sup>

USA. NIOSH Recommended  
Exposure Limits  
Remarks Potential Occupational Carcinogen  
See Appendix A  
TWA 1 mg/m<sup>3</sup> USA. Occupational Exposure Limits  
(OSHA) - Table Z-1 Limits for Air  
Contaminants  
TWA 0.015 mg/m<sup>3</sup> USA. NIOSH Recommended  
Exposure Limits

Potential Occupational Carcinogen  
See Appendix A

## 8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate

government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without

touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after

use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method:

EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the

supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an

industrial hygienist and safety officer familiar with the specific situation of anticipated use by our

customers. It

should not be construed as offering an approval for any specific use scenario.

#### Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to

the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type

N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the

sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and

approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

---

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) Appearance Form: crystalline

b) Odor No data available

c) Odor Threshold No data available

d) pH No data available

e) Melting point/freezing  
point

No data available

f) Initial boiling point and  
boiling range

No data available

g) Flash point No data available

h) Evaporation rate No data available

i) Flammability (solid, gas) No data available

j) Upper/lower

flammability or

explosive limits

k) Vapor pressure No data available

l) Vapor density No data available

m) Relative density 1.798 g/mL at 25 °C (77 °F)

n) Water solubility No data available

o) Partition coefficient: octanol/  
water

No data available

p) Auto-ignition

temperature

No data available

q) Decomposition

temperature

No data available

r) Viscosity No data available

s) Explosive properties No data available

t) Oxidizing properties No data available

### 9.2 Other safety information

No data available

---

## **SECTION 10. STABILITY AND REACTIVITY**

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Strong acids, Strong bases

### 10.6 Hazardous decomposition products

Other decomposition products - No data available

In the event of fire: see section 5

---

## **SECTION 11. TOXICOLOGICAL INFORMATION**

### 11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 350 mg/kg

Inhalation: No data available

Dermal: No data available

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

Germ cell mutagenicity

Mouse

mammary gland

Cytogenetic analysis

Rat

DNA damage

Carcinogenicity

This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

Possible human carcinogen

IARC: 1 - Group 1: Carcinogenic to humans (Nickel di(acetate))

NTP: Known to be human carcinogen (Nickel di(acetate))

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

No data available

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: QR6126000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

---

## **SECTION 12. ECOLOGICAL INFORMATION**

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

---

## **SECTION 13. DISPOSAL CONSIDERATIONS**

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste

disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a

chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

---

## **SECTION 14. TRANSPORT INFORMATION**

DOT (US)

Not dangerous goods

IMDG

UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Nickel di(acetate))

Marine pollutant:yes

IATA

UN number: 3077 Class: 9 Packing group: III

Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Nickel di(acetate))

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

---

## **SECTION 15. REGULATORY INFORMATION**

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

Nickel di(acetate)

CAS-No.

6018-89-9

Revision Date

1993-04-24

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

Nickel di(acetate)

CAS-No.

6018-89-9

Revision Date

1993-04-24

Pennsylvania Right To Know Components

Nickel di(acetate)

CAS-No.

6018-89-9

Revision Date

1993-04-24

New Jersey Right To Know Components

Nickel di(acetate)

CAS-No.

6018-89-9

Revision Date

1993-04-24

California Prop. 65 Components

WARNING! This product contains a chemical known to the State of California to cause cancer.

Nickel di(acetate)

CAS-No.

6018-89-9

Revision Date

2007-09-28

---

## **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.