

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name            Nickel (II) acetate tetrahydrate  
CAS number             6018-89-9  
Synonyms                Acetic acid, nickel(II) salt

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses            Laboratory chemicals.

#### 1.3 Details of the supplier of the safety data sheet

Company                    Lab Alley, LLC  
                                  12501 Pauls Valley Road  
                                  Austin, Texas 78737  
                                  U.S.A.  
  
Telephone                 512-668-9918  
Fax                            512-886-4008

#### 1.4 Emergency telephone

**Emergency Phone #**            US & Canada: 1-800-535-5053            INFOTRAC  
   International 1-352-323-3500            INFOTRAC

### SECTION 2: Hazards identification


#### 2.1 Classification of the substance or mixture

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

Acute Oral Toxicity	Category 4
Acute Inhalation Toxicity - Dusts and Mists	Category 4
Respiratory Sensitization	Category 1
Skin Sensitization	Category 1
Germ Cell Mutagenicity	Category 2
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 1B

Specific Target Organ Toxicity (single exposure) Target Organ(s) - Respiratory system.	Category 3
Specific Target Organ Toxicity (repeated exposure) Target Organ(s) - Liver, Kidney	Category 1

## 2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal Word	Danger
Hazard statements	<p>May cause an allergic skin reaction.</p> <p>May cause allergy or asthma symptoms or breathing difficulties if inhaled.</p> <p>May cause respiratory irritation.</p> <p>Suspected of causing genetic defects.</p> <p>May cause cancer by inhalation.</p> <p>May damage the unborn child.</p> <p>Causes damage to organs through prolonged or repeated exposure.</p> <p>Harmful if swallowed or if inhaled.</p>
Precautionary statements	<p>Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink, or smoke when using this product. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation, wear respiratory protection. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves. Do not breathe dust/fume/gas/vapors/spray.</p> <p>Response: If exposed or concerned, get medical attention/advice.</p> <p>IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms, call a POISON CENTER or doctor/physician.</p> <p>IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs, get medical advice/attention. Wash contaminated clothing before re-use.</p> <p>IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.</p>

Storage: Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Disposal: Dispose of contents/container to an approved waste disposal plant.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Very toxic to aquatic life with long lasting effects.

WARNING: Cancer and Reproductive Harm.

## SECTION 3: Composition/information on ingredients

### 3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Nickel (II) acetate tetrahydrate	Acetic acid, nickel(II) salt	6018-89-9	> 95%

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

#### If inhaled

Remove to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

#### In case of skin contact

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

#### In case of eye contact

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

#### If swallowed

Do NOT induce vomiting. Call a physician or poison control center immediately.

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

May cause allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. 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.

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

Show this safety data sheet to the doctor in attendance; immediate medical attention is required. Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** Water spray, Carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam.

**Unsuitable extinguishing media** No information available.

### 5.2 Specific hazards arising from the substance or mixture

Do not allow run-off from fire-fighting to enter drains or water courses. Burning produces obnoxious and toxic fumes.

Hazardous Combustion Products: Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

### 5.3 Special 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. Thermal decomposition can lead to release of irritating gases and vapors.

### 5.4 Further information

**Flash Point** 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.

#### NFPA

Health	Flammability	Instability	Physical hazards
3	0	0	N/A

## SECTION 6: Accidental release measures

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

Ensure adequate ventilation. Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Avoid dust formation.

### 6.2 Environmental precautions

Should not be released into the environment.

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

Avoid dust formation. Sweep up and shovel into suitable containers for disposal.

#### 6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

##### Precautions on safe handling

Use only under a chemical fume hood. Wear personal protective equipment/face protection. Do not breathe (dust, vapor, mist, gas). Do not get in eyes, on skin, or on clothing. Avoid dust formation. Do not ingest. If swallowed, seek immediate medical assistance.

##### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

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

##### Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials.

##### Incompatibilities

Strong oxidizing agents, strong acids, strong bases.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Occupational exposure limits

##### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Nickel(II) acetate tetrahydrate	(Vacated) TWA	0.1 mg/m <sup>3</sup>

##### US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Nickel(II) acetate tetrahydrate	IDLH	10 mg/m <sup>3</sup>
	TWA	0.015 mg/m <sup>3</sup>

##### Biological occupational exposure limits

No information available

#### 8.2 Exposure controls

##### Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

## 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 protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

### Body Protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

### Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Recommended Filter type: Particulates filter conforming to EN 143.

### Control of environmental exposure

No information available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical State	Powder solid
Appearance	Greenish-blue
Odor	Odorless
Odor Threshold	No information available
pH	No information available
Melting Point/Range	250°C / 482°F
Boiling Point/Range	No information available
Evaporation Rate	Not applicable
Flammability (solid)	No information available
Flammability or explosive limit	No data available
Upper	
Lower	
Vapor Pressure	No information available
Vapor Density	Not applicable
Density	No information available
Solubility	Soluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No information available

Decomposition Temp	> 80°C
Viscosity	Not applicable
Molecular Formula	C4H6O4Ni - 4H2O
Molecular Weight	248.86 g/mol
VOC Content(%)	No information available
Oxidizing properties	No information available

## 9.2 Other safety information

No information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No known reactive hazards.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

None under normal processing.

### 10.4 Conditions to avoid

Incompatible products and excess heat.

### 10.5 Incompatible materials

Strong oxidizing agents, strong acids, strong bases.

### 10.6 Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

#### Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Nickel (II) acetate tetrahydrate	350 mg/kg (Rat)	-	-

#### Skin corrosion/irritation

May cause skin irritation.

#### Serious eye damage/eye irritation

May cause eye irritation.

**Respiratory or skin sensitization**

May cause respiratory tract irritation.

**Germ cell mutagenicity**

Mutagenic effects have occurred in humans.

**Carcinogenicity**

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Nickel (II) acetate tetrahydrate	6018-89-9	Group 1	Known	Not listed	X	Not listed

**Specific target organ toxicity - single exposure**

Respiratory system.

**Specific target organ toxicity - repeated exposure**

Liver, kidney.

**Reproductive toxicity**

Experiments have shown reproductive toxicity effects on laboratory animals.

**Chronic effects**

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.

**11.2 Additional Information**

The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

**SECTION 12: Ecological information****12.1 Toxicity**

Very toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

Product	Species	Test Results
Nickel (II) acetate tetrahydrate	Freshwater Algae	1.68 mg/L 72h
Nickel (II) acetate	Freshwater Fish (Channa argus)	LD50 = 306.9 mg/L 96h

**12.2 Persistence and degradability**

Soluble in water. Persistence is unlikely.

**12.3 Bio accumulative potential**

No information available.

**12.4 Mobility in soil**



Likely mobile in the environment due to its water solubility.

### 12.5 Results of PBT and vPvB assessment

No information available.

### 12.6 Endocrine disrupting properties

No information available.

### 12.7 Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### 13.1 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 (US)

UN-no	UN3077
Proper Shipping Name	Environmentally hazardous substances, solid, n.o.s.
Hazard Class	9
Packing Group	III

### IMDG

UN-no	UN3077
Proper Shipping Name	Environmentally hazardous substances, solid, n.o.s.
Hazard Class	9
Packing Group	III

### IATA

UN-no	UN3077
Proper Shipping Name	Environmentally hazardous substances, solid, n.o.s.
Hazard Class	9
Packing Group	III

## SECTION 15: Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not applicable.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not regulated.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not applicable.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous**

See Section 2 for more information.

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Listed.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act**

Not regulated.

**Clean Water Act (CWA - Toxic Pollutants)**

Listed.

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Not listed.

**US state regulations**

**US. Massachusetts RTK - Substance List**

Not listed.

**US. New Jersey Worker and Community Right-to-Know Act**

Listed.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Listed.

**California Proposition 65**

Listed, Developmental Carcinogen.

## **SECTION 16: Other information**

Issue date: 09/17/2024

## **SECTION 17: Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.