

Safety Data Sheet: Nickel(II) Acetate Tetrahydrate

1. Identification

Product	Nickel(II) Acetate Tetrahydrate; CAS 6018-89-9; EC 206-761-7
Use	Industrial nickel catalyst and surface-treatment precursor.
Company	Hainan Zhongxin Chemical Co., Ltd. (ZXCHEM)
Address	Room 1001, Building A, Caohejing Center, No. 1520 Gumei Road, Xuhui District, Shanghai, China
Telephone / email	+86-21-54265599 / sales@zxchem.com.cn
Emergency contact	ZXCHEM office number above, office hours, China time (UTC+8). For urgent medical assistance contact local emergency services.
Scope	Reference safety information for Nickel(II) Acetate Tetrahydrate. The reference composition, concentration and supply-grade differences are described in Section 3. This document does not certify the composition or transport status of a specific delivered batch or a different formulation.

2. Hazards Identification

Classification	Acute oral and inhalation toxicity Category 4; respiratory and skin sensitization Category 1; mutagenicity Category 2; carcinogenicity Category 1A; reproductive toxicity Category 1B; STOT single exposure Category 3 and repeated exposure Category 1.
Signal word / symbols	Danger; GHS07, GHS08, GHS09
Hazard statements	H302/H332: harmful oral or inhalation exposure. H317/H334: skin and respiratory sensitization. H335: respiratory irritation. H341: suspected genetic harm. H350i: inhalation cancer hazard. H360D: developmental harm. H372: repeated-exposure organ damage. Aquatic toxicity requires environmental controls.
Prevention	Use adequate ventilation; avoid inhaling dust. Prevent skin and eye contact. Wear suitable chemical-resistant gloves and eye protection. Wash after handling; keep food and drink out of the work area.
Response	After exposure, stop work and seek medical advice. For severe exposure obtain urgent medical care. Rinse contaminated skin or eyes with water; move an inhalation casualty to fresh air.
Environment	Prevent uncontrolled release to drains, soil or surface water. Collect spills for appropriate disposal.



3. Composition / Information on Ingredients

Reference ingredient	Nickel acetate tetrahydrate CAS 6018-89-9; concentrated substance reference. Ordered supply purity ≥99.0%; no batch impurity composition is inferred.
Supply grade	Purity ≥99.0%
Applicability	The cited concentration or purity describes the reference material. It is not a certificate of analysis for the delivered batch; different solvents or dilutions require the matching supplier safety document.

4. First-Aid Measures

General	Protect the rescuer from exposure and show the product information to medical personnel. Obtain medical advice if symptoms occur or exposure is significant.
Inhalation	Move to fresh air and keep the person comfortable. Seek medical care for breathing difficulty or persistent symptoms. Avoid exposing rescuers to dust.
Skin	Remove contaminated clothing and rinse skin thoroughly with water. Seek medical advice for persistent irritation.
Eyes	Rinse gently with clean water for at least 15 minutes. Remove contact lenses when easy and continue rinsing. Seek medical advice if irritation persists.
Ingestion	Rinse the mouth. Do not induce vomiting. Give nothing by mouth to an unconscious person. Obtain medical advice.
Effects / treatment	Sensitization and respiratory effects can follow exposure. Chronic hazards include carcinogenicity, developmental toxicity and repeated-exposure organ injury. Treatment is symptomatic and directed by a clinician.

5. Fire-Fighting Measures

Extinguishing media	Use water spray, foam, dry chemical or carbon dioxide suited to the surrounding fire.
Hazards	Fire or thermal decomposition can generate carbon oxides and nickel-containing fumes.
Protection	Firefighters require suitable protective clothing and self-contained breathing equipment. Prevent contaminated firefighting water entering drains.

6. Accidental Release Measures

Personnel	Restrict access, avoid airborne powder and use appropriate nickel-exposure protection.
Environment	Prevent discharge to drains, water and soil.
Cleanup	Collect mechanically using controlled methods or suitable filtered equipment. Avoid dry sweeping that disperses dust; place residues in labelled closed containers.

7. Handling and Storage

Handling	Use enclosed handling and local extraction to prevent nickel exposure. Wear suitable chemical-resistant gloves, protective clothing and eye protection. Use respiratory protection where the exposure assessment requires it. Keep contaminated work clothing separate and prevent releases to drains.
Storage	Store tightly sealed in a cool, dry, ventilated place with controlled access. Protect from moisture, contamination and excessive heating; keep separate from oxidizers and alkaline materials.
Incompatibilities	Strong oxidizing agents and alkaline materials.

8. Exposure Controls / Personal Protection

Exposure controls	Reference NIOSH REL 0.015 mg/m ³ as nickel. Use current jurisdictional limits, enclosed powder transfer and a suitable respiratory-protection program.
Engineering	Use enclosed powder transfer and local extraction. Provide eyewash and washing facilities.
Protection	Use enclosed handling and local extraction to prevent nickel exposure. Wear suitable chemical-resistant gloves, protective clothing and eye protection. Use respiratory protection where the exposure assessment requires it. Keep contaminated work clothing separate and prevent releases to drains.

9. Physical and Chemical Properties

Appearance	Green crystalline powder
Formula	$\text{Ni}(\text{CH}_3\text{COO})_2 \cdot 4\text{H}_2\text{O}$
Molecular weight	248.84 g/mol
Supply reference density at 20/4°C	1.744
Physical form	Green crystalline powder

10. Stability and Reactivity

Stability	Handle and store under the recommended conditions. Prevent contamination and unnecessary heating.
Incompatibilities	Strong oxidizing agents and alkaline materials.
Decomposition	Fire or thermal decomposition can generate carbon oxides and nickel-containing fumes.

11. Toxicological Information

Exposure effects	Sensitization and respiratory effects can follow exposure. Chronic hazards include carcinogenicity, developmental toxicity and repeated-exposure organ injury.
Reference classification	Acute oral and inhalation toxicity Category 4; respiratory and skin sensitization Category 1; mutagenicity Category 2; carcinogenicity Category 1A; reproductive toxicity Category 1B; STOT single exposure Category 3 and repeated exposure Category 1.
Toxicological data	The selected reference classifies oral and inhalation toxicity, sensitization, mutagenicity, cancer, developmental toxicity and repeated-exposure organ injury. No safe exposure is established by a purity specification.

12. Ecological Information

Environmental effects	Nickel-containing releases pose aquatic hazards. Capture contaminated liquids and powder; manage all residues through authorized recovery or chemical-waste routes.
Controls	Prevent uncontrolled release, collect spills and dispose of contaminated material through an authorized route.
Assessment	No product-specific PBT/vPvB assessment is claimed. Absence of data does not establish absence of environmental effects.

13. Disposal Considerations

Product	Collect surplus product and contaminated cleanup material for disposal by an authorized chemical-waste contractor in accordance with local requirements.
Packaging	Containers may retain product residues. Do not reuse contaminated packaging without an approved cleaning process; use an authorized disposal route.

14. Transport Information

Classification	Class 9 — Environmentally hazardous
UN number	UN 3077
Shipping name	Environmentally hazardous substance, solid, n.o.s. (nickel acetate tetrahydrate)
Class / packing group	DOT, TDG, IMDG and IATA: Class 9, packing group III.
Transport precautions	Protect packaging and closures from damage, secure loads and prevent releases. This reference is not a shipping declaration for a specific consignment.

15. Regulatory Information

Identity	Nickel(II) Acetate Tetrahydrate; CAS 6018-89-9; EC 206-761-7
HS reference	291529; reference heading rather than a destination customs ruling.
Compliance	Apply applicable workplace, environmental and transport rules. A raw-material listing does not establish finished-product authorization.
Assessment	No ZXCHEM-specific chemical safety assessment or destination registration is asserted.

16. Other Information

Hazard meanings	H302/H332: harmful oral or inhalation exposure. H317/H334: skin and respiratory sensitization. H335: respiratory irritation. H341: suspected genetic harm. H350i: inhalation cancer hazard. H360D: developmental harm. H372: repeated-exposure organ damage. Aquatic toxicity requires environmental controls.
Limitations	Prepared as reference safety information for the identified material. It is not a batch analytical certificate or safety assessment of a different solvent-containing formulation.
Revision	2026.2; prepared 2026-10-06. Customer-document branding and title corrected; technical safety data retained.
Document scope	Reference safety information for the material and grade described in Sections 1 and 3. Different concentrations, solvents or formulations require the applicable safety information. This is not a batch analytical certificate.

Revision: 2026.2 | Revision date: 2026-10-06