Infosafe No™ 1CHJ7 Issue Date :July 2021 RE-ISSUED by CHEMSUPP

Product Name **NICKEL ACETATE Tetrahydrate**

Classified as hazardous

1. Identification

GHS Product Identifier	NICKEL ACETATE Tetrahydrate
Company Name	CHEMSUPPLY AUSTRALIA PTY LTD (ABN 19 008 264 211)
Address	38 - 50 Bedford Street GILLMAN SA 5013 Australia
Telephone/Fax Number	Tel: (08) 8440-2000
Emergency phone number	CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)
E-mail Address	www.chemsupply.com.au
Recommended use of the chemical and restrictions on use	Textiles (mordant), hydrogenation catalyst; intermediate in the formation of other nickel compounds; as a sealer for anodized aluminium; nickel electroplating; electrodeless nickel-hydrazine coating reagent and laboratory reagent.

Other Names

Name	Product Code
NICKEL ACETATE Tetrahydrate LR	NL006

Other Information

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

2. Hazard Identification

GHS classification of the substance/mixture	Acute toxicity - Oral: Category 4 Acute toxicity - Inhalation: Category 4 Carcinogenicity: Catego: Category 2 Germ cell mutagenicity: Category 2 Specific target organ toxicity (repeated exposure): Category 1 Reproductive toxicity: Category 1B Respiratory sensitisation: Category 1 Skin irritation: Category 2 Skin sensitisation: Category 1
Signal Word (s)	DANGER
Hazard Statement (s)	H302 (Harmful if swallowed) H332 (Harmful if inhaled) H350i (May cause cancer by inhalation) H341 (Suspected of causing genetic defects) H315 (Causes skin irritation) H372 (Causes damage to organs through prolonged or repeated exposure) H360D (May damage the unborn child) H334 (May cause allergy or asthma symptoms or breathing difficulties if inhaled) H317 (May cause an allergic skin reaction)
Pictogram (s)	Health hazard, Exclamation mark,

Precautionary statement – Prevention

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Do not breathe dust/fume/gas/mist/vapours/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.
P285 In case of inadequate ventilation wear respiratory protection.

Precautionary statement – Response

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before use.
P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER or doctor/ physician if you feel unwell.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Precautionary statement – Storage

P405 Store locked up.

Precautionary statement – Disposal

P501 Dispose of contents/container in accordance with local, state and federal government regulations.

3. Composition/information on ingredients

Ingredients	Name	CAS	Proportion
	Nickel Acetate	6018-89-9	100 %

4. First-aid measures

Inhalation

If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Immediately obtain medical aid if cough or other symptoms appear.

Ingestion

Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek immediate medical advice.

Skin

Wash affected areas with copious quantities of water immediately. Remove contaminated clothing and wash before re-use. Seek medical attention.

Eye contact

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek medical attention.

First Aid Facilities

Maintain eyewash fountain and safety shower in work area.

Advice to Doctor

Treat symptomatically based on judgement of doctor and individual reactions of the patient.

Other Information

For advice, contact a Poisons Information Centre (Phone eg Australia 13 1126; New Zealand 0800 764 766) or a doctor.

5. Fire-fighting measures

Hazards from Combustion Products

Toxic gases and vapours, such as nickel carbonyl, carbon dioxide, carbon monoxide, nickel oxides.

Specific Methods

Small fire: Use dry chemical, CO2, water spray or foam.
Large fire: Use water spray, fog or foam.
If safe to do so, move undamaged containers from the fire area. Cool

	containers with flooding quantities of water until well after the fire is out.
Specific hazards arising from the chemical	May burn but do not ignite readily. Runoff may pollute waterways. Fire may produce irritating, poisonous and/or corrosive fumes. Containers may explode when heated.
Hazchem Code	2X
Decomposition Temp.	250 °C
Precautions in connection with Fire	Wear SCBA and structural firefighter's uniform.

6. Accidental release measures

Spills & Disposal	Eliminate all ignition sources (no smoking, flares, sparks or flame) within at least 15m. Do NOT touch or walk through this product. Stop leak if safe to do so. Prevent entry into waterways, drains, confined areas. Prevent dust cloud. Use clean non-sparking tools to collect material and place it into loosely-covered plastic containers for later disposal. SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.
Personal Precautions	Avoid substance contact. Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms.
Personal Protection	Wear protective clothing specified for normal operations (see Section 8)
Clean-up Methods - Small Spillages	Sweep up (avoid generating dust) and using clean non-sparking tools transfer to a clean, suitable, clearly labelled container for disposal in accordance with local regulations.

7. Handling and storage

Precautions for Safe Handling	Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.
Conditions for safe storage, including any incompatibilities	Store away from foodstuffs. Keep containers securely sealed and protected against physical damage. Keep container tightly closed and dry, away from direct sunlight.
Storage Temperatures	Store at room temperature (15 to 25 °C recommended).

8. Exposure controls/personal protection

Other Exposure Information	These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity. A time weighted average (TWA) has been established for Nickel, soluble compounds (as Ni) (Safe Work Australia) of 0.1 mg/m³. The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. Note: Substance is known to act as sensitiser. 'Sen' notice - sensitiser. The substance can cause a specific immune response in some people. An affected individual may subsequently react to minute levels of that substance.
Appropriate engineering controls	Maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods.
Respiratory Protection	Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.
Eye Protection	The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Hand Protection	Wear gloves of impervious material conforming to AS/NZS 2161: Occupational protective gloves - Selection, use and maintenance. Final choice of appropriate glove type will vary according to individual circumstances. This can include methods of handling, and engineering controls as determined by appropriate risk assessments. Avoid skin contact when removing gloves from hands, do not touch the gloves outer surface. Dispose of gloves as hazardous waste.
Personal Protective Equipment	Personal protective equipment should not solely be relied upon to control risk and should only be used when all other reasonably practicable control measures do not eliminate or sufficiently minimise risk. Guidance in selecting personal protective equipment can be obtained from Australian, Australian/New Zealand or other approved standards.
Footwear	Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.
Body Protection	Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.
Hygiene Measures	Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

9. Physical and chemical properties

Form	Solid
Appearance	Green monoclinic crystals.
Odour	Weak acetic odour.
Decomposition Temperature	250 °C
Melting Point	Decomposes before melting; 250 °C.
Solubility in Water	Soluble.
Solubility in Organic Solvents	Soluble in dilute alcohol, and 12.5 mol % in acetic acid @ 30 °C, Insoluble in alcohol.
Specific Gravity	1.798
Flammability	Combustible.
Molecular Weight	248.84

10. Stability and reactivity

Chemical Stability	Stable under normal temperatures and pressures. Effloresces somewhat in air.
Conditions to Avoid	Dust generation, excess heat.
Incompatible Materials	Strong oxidizing agents, acids, bases.
Hazardous Decomposition Products	Carbon monoxide, irritating and toxic gases, carbon dioxide, nickel oxide, nickel carbonyls.
Hazardous Polymerization	Will not occur.

11. Toxicological Information

Acute Toxicity - Oral	LD50 (rat): 350 mg/kg.
Ingestion	Harmful if swallowed. Causes gastrointestinal irritation with nausea, vomiting and diarrhea.
Inhalation	Harmful if inhaled. May cause allergic respiratory reaction. In rare instances, exposure may cause sensitization, resulting in inflammation of the mucous membranes and in eczematous eruptions.

Skin	Causes skin irritation. May cause dermatitis. Causes 'nickel itch' which is a dermatitis resulting from sensitization to nickel, which is characterized by skin eruptions, followed by discrete ulcers that may discharge and become crusted, or by eczema.
Eye	May cause eye irritation.
Respiratory sensitisation	Respiratory sensitisation: Category 1 H334 (May cause allergy or asthma symptoms or breathing difficulties if inhaled)
Skin Sensitisation	Skin irritation: Category 2 H317 (May cause an allergic skin reaction)
Germ cell mutagenicity	Germ cell mutagenicity: Category 2 H360D (May damage the unborn child)
Carcinogenicity	Nickel compounds (NB: Evaluated as a group) are evaluated in the IARC Monographs (Vol. 49; 1990) as Group 1: Carcinogenic to humans. Carcinogenicity: Category: Category 2 H350i (May cause cancer by inhalation)
Reproductive Toxicity	Reproductive toxicity: Category 1B H360D (May damage the unborn child)
STOT-single exposure	Not classified based on available information.
STOT-repeated exposure	Specific target organ toxicity (repeated exposure): Category 1 H372 (Causes damage to organs through prolonged or repeated exposure)
Chronic Effects	May cause respiratory tract cancer. May cause cancer according to animal studies. Symptoms of overexposure to nickel can cause sensitization, dermatitis, allergic asthma and pneumonitis.
Mutagenicity	Evidence of mutagenic effects. Not classified based on available information.

12. Ecological information

Ecological Information	No ecological problems are to be expected when the product is handled and used with due care and attention.
Ecotoxicity	Quantitative data on the ecological effect of this product are not available.
Persistence and degradability	Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

13. Disposal considerations

Disposal Considerations	Whatever cannot be saved for recovery or recycling should be disposed of according to relevant local, state and federal government regulations.

14. Transport information

Transport Information	Class 9 Miscellaneous dangerous goods shall not be loaded in a vehicle with: - Class 1 Explosives - Class 5. 1 Oxidizing agents (when Class 9 substance capable of igniting and burning - Class 5. 2 Organic peroxides (when Cl. 9 capable of igniting/burning)
U.N. Number	3077
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. - (Nickel acetate terahydrate)
Transport hazard class(es)	9
Hazchem Code	2X
Packing Group	III
EPG Number	9C1
IERG Number	47

15. Regulatory information

Regulatory Information All the constituents of this product are listed on the Australian Inventory of Chemical Substances (AICS), or exempted. Not listed under WHS Regulation 2011, Schedule 10 - Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Poisons Schedule Not Scheduled

16. Other Information

Literature References 'Standard for the Uniform Scheduling of Medicines and Poisons .', Commonwealth of Australia.
National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'.
Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals'.
Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand.
Safe Work Australia, 'Hazardous Chemical Information System'.
Safe Work Australia, 'National Code of Practice for the Labelling of Safe Work Hazardous Substances'.
Safe Work Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment'.

Contact Person/Point Paul McCarthy Ph. (08) 8440 2000 DISCLAIMER STATEMENT:
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Empirical Formula & Structural Formula Empirical Formula: C4H14O8Ni
Structural Formula: (CH3COO)2Ni.4H2O

...End Of MSDS...