

SAFETY DATA SHEET

KEMAUS

NICKEL NITRATE 6-HYDRATE AR

1. Identification of the substance/preparation and of the company or firm

1.1 Identification of the substance or preparation:

Catalogue no. : KA339

Product name : Nickel nitrate 6-hydrate AR

1.2 Use of the substance/preparation:

For laboratory utilisation, analysis, research and fine chemistry.

1.3 Identification of the company or firm:

Elago Enterprises Pty Ltd, 5 The Cloisters, Cherrybrook, N.S.W. 2126, Australia

Tel no. (61) 2 98998169

Fax no. (61) 2 98997976

1.4 Emergency telephone:

(61) 2 98998169 (9:00am - 5:00 pm) [Office hours]

2. Identification of dangers

2.1 Classification of the substance.

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Acute toxicity, Inhalation, Category 4: Harmful if inhaled.

Acute toxicity, Oral, Category 4 : Harmful if swallowed.

Hazardous to the aquatic environment, Acute hazard, Category 1 : Very toxic to aquatic life with long lasting effects.

Serious eye damage, Category 1 : Causes serious eye damage.

Oxidising solids, Category 2 : May intensify fire; oxidiser.

Reproductive toxicity, Category 1B : May damage the unborn child. Suspected of damaging fertility.

Respiratory sensitisation, Category 1 : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin irritation, Category 2 : Causes skin irritation.

Skin sensitisation, Category 1 : May cause an allergic skin reaction.

2.2 Label elements.

Hazard pictograms



Signal words : Warning.

EU Hazard statements (EUH):

Restricted to professional users.

Hazard statements (H) :

H272 : May intensify fire; oxidiser.

H302 : Harmful if swallowed.

H332 : Harmful if inhaled.

H315 : Causes skin irritation.

H317 : May cause an allergic skin reaction.

H318 : Causes serious eye damage.

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

H340 : May cause genetic defects.

H351 : Suspected of causing cancer.

H360Df : May damage the unborn child. Suspected of damaging fertility.

H373 : May cause damage to organs through prolonged or repeated exposure.

H410 : Very toxic to aquatic life with long lasting effects.

Precautionary statements (P) :

P201 : Obtain special instructions before use.

P273 : Avoid release to the environment.

P310 : Immediately call a POISON CENTER/doctor.

P314 : Get medical advice/attention if you feel unwell.

P308+P313 : IF exposed or concerned: Get medical advice/attention.

P342+P311 : If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3 Other hazards.

None known.

3. Composition/information on ingredients

3.1 Substance / Preparation.

Nickel nitrate 6-hydrate

Formular: $\text{Ni}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$

CAS No : 13478-00-7

Molecular weight : 290.80

Contains no other components or impurities which will influence the classification of the product.

3.2 Mixture.

Not applicable.

4. First-aid measures

4.1 Description of first aid measures.

Inhaling: Take the person out into the fresh air. If breathing is irregular or stops, perform artificial respiration. If unconscious, seek medical assistance.

Skin contact: Remove contaminated clothing. Wash skin with plenty of water. seek medical assistance.

Eyes: Wash with plenty of water, keeping eyelids open. Immediate medical attention is required.

Ingestion: Never induce vomiting. Immediate medical attention is required.

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

Harmful and Toxic Product, ingestion or inhalation can be harmful. Accidental contact may result in serious respiratory difficulties, severe eye damage, swelling, trouble breathing, chest pain and muscle pain. Seek immediate medical assistance.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

5. Fire-fighting measures

5.1 Suitable extinguishing media.

Recommended extinguishing methods: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

5.2 Special hazards arising from the substance.

Special risks: Under fire conditions, hazardous fumes will be present. Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.

Do not enter fire area without proper protective equipment, including respiratory protection.

Fire protection equipment: According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and gloves.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.

6.3 Methods and material for containment and cleaning up.

The contaminated area should be immediately cleaned with an appropriate de-contaminator. Store away from other materials.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

7. Handling and storage

7.1 Precautions for safe handling.

Ensure good ventilation and renewal of the air in the premises. Avoid breathing dust, fume, gas, mist, vapours, spray. Do not eat, drink or smoke when using this product. Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Well sealed containers. Dry atmosphere. Away from sources of ignition and heat. Prevent the entry of non-authorised persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

7.3 Specific end use(s).

None.

8. Exposure controls/personal protection

8.1 Control parameters.

The product contain substances with Professional Exposure Environmental Limit Values.

Nickel nitrate 6-hydrate : $0.1\text{mg}/\text{m}^3$ (8 hr.)

The product does NOT contain substances with Biological Limit Values.

8.2 Exposure controls.

Personal protection : Avoid all unnecessary exposure.

Respiratory protection : Wear approved mask.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Hygiene measures : Remove contaminated clothing. Wash hands before breaks and when the job is done.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties.

Appearance:	Solid.
Colour:	Green crystals.
Odour:	Odorless.
Odour threshold:	No data available.
pH value:	No data available.
Melting Point:	56°C
Boiling Point:	137°C
Flash point:	No data available.
Flammability (solid, gas) :	No data available.
Evaporation rate :	No data available.
Vapour pressure:	No data available.
Vapour density :	No data available.
Lower Explosive Limit:	No data available.
Upper Explosive Limit:	No data available.
Solubility:	940 g/l @ 20°C
Density:	2.05
Relative density	No data available.
Partition coefficient (n-octanol/water):	No data available.
Viscosity:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.
Decomposition temperature:	137°C

9.2 Other information.

None.

10. Stability and reactivity

10.1 Reactivity.

Reactivity product.

10.2 Chemical stability.

Oxidizer product: contact with combustible/organic material may cause fire.

10.3 Possibility of hazardous reactions.

Neutralization can occur on contact with bases. May intensify fire, oxidiser.

10.4 Conditions to avoid.

Avoid contact with bases. Combustible material.

10.5 Incompatible materials.

Incompatible with bases. Strong oxidizing agents. Flammable materials. Explosives materials.

10.6 Hazardous decomposition products.

Depending on conditions of use, can be generated corrosive/oxidizing vapors or gases.

11. Toxicological information

11.1 Information on toxicological effects.

Acute toxicity.	LD50 oral rat : 1620mg/kg
Inhalation:	Harmful if inhaled.
Dermal:	Based on available data, the classification criteria are not met.
Ingestion:	Harmful if swallowed
Corrosion:	Skin irritant, Category 2: Causes skin irritation.
Irritation:	Serious eye damage, Category 1: Causes serious eye damage.
Sensitization:	Respiratory sensitiser, Category 1: May cause allergy or asthma symptoms or breathing difficulties if inhaled. Skin sensitiser, Category 1: May cause an allergic skin reaction.
Mutagenicity:	Mutagen, Category 2: Suspected of causing genetic defects.
Carcinogenicity:	Carcinogen, Category 1A: May cause cancer.
Toxic for reproduction:	Reproductive toxicant, Category 1B: May damage fertility or the unborn child.
STOT-single exposure:	Based on available data, the classification criteria are not met.

STOT-repeated exposure: Specific target organ toxicity following a repeated exposure, Category 1: Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard: Based on available data, the classification criteria are not met.

12. Ecological information

12.1 Toxicity.

Toxicity to fish.

LC50 Cyprinus carpio : 10.6 mg/l; 96 h

Toxicity to Aquatic invertebrates.

EC50 Daphnia magna : 0.9 g/l (48 h)

12.2 Persistence and Degradability.

Biodegradable.

12.3 Bioaccumulative potential.

Not established.

12.4 Mobility in soil

Not established.

12.5 Results of PBT and vPvB assessment.

The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

12.6 Other adverse effects.

Discharge into the environment must be avoided.

13. Disposal considerations

13.1 Waste treatment methods.

Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

14. Transport information

14.1 UN number.

UN2725

14.2 UN proper shipping name.

UN 2725, NICKEL NITRATE, 5.1, PG III, (E)

14.3 Transport hazard class(es).

Class: 5.1

14.4 Packing group.

Packing group: III

14.5 Environmental hazards.

Marine pollutant: Yes, dangerous for the environment.

14.6 Special precautions for user.

Hazard number: 50

ADR LQ: 5 kg

Provisions concerning carriage in bulk ADR:

VC1: Carriage in bulk in sheeted vehicles, sheeted containers or sheeted bulk containers is permitted.

VC2: Carriage in bulk in closed vehicles, closed containers or closed bulk containers is permitted.

AP6: If the vehicle or container is made of wood or other combustible material, an impermeable surfacing resistant to combustion or a coating of sodium silicate or similar substance shall be provided.

Sheeting shall also be impermeable and non-combustible.

AP7: Carriage in bulk shall only be as a full load.

Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-A,S-Q

Proceed in accordance with point 6.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code.

The product is not transported in bulk.

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance.

Ensure all national/local regulations are observed.

The product is not affected by REACH Restrictions - Annex XVII

The product is not affected by REACH Authorisation - Annex XIV

15.2 Chemical safety assessment.

Not Scheduled.

16. Other Information

Abbreviations and acronyms :

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

EC50: Effective concentration, 50%

IC50: Inhibitory Concentration, 50%

LC50: Lethal concentration, 50%.

LD50: Lethal dose, 50%.

Log Pow: Logarithm of the partition octanol-water.

PBT: persistent, bioaccumulative and toxic. vPvB: very persistent and very bioaccumulative.

Sources of key data used.

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Review number and date.

v.1.1

Date published.

19-Apr-2013

Further information.

None.

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

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