

# SAFETY DATA SHEET

# KEMMAUS

## COBALT (II) NITRATE 6-HYDRATE AR

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

#### 1.1 Identification of the substance or preparation:

Catalogue no. : KA164

Product name : Cobalt (II) 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 ]

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### 2. Identification of dangers

#### 2.1 Classification of the substance.

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

Carcinogen, Category 1B: May cause cancer by inhalation.

Mutagen, Category 2: Suspected of causing genetic defects.

Reproductive toxicant, Category 1B: May damage fertility.

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.

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

#### 2.2 Label elements.

Hazard pictograms



Signal words : Danger.

Hazard statements (H) :

H317 : May cause an allergic skin reaction.

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

H341 : Suspected of causing genetic defects.

H350i : May cause cancer by inhalation.

H360F : May damage fertility.

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

P280 : Wear protective gloves.

P302+P352 : IF ON SKIN: Wash with plenty of soap and water

P304+P340 : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

#### 2.3 Other hazards.

None known.

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### 3. Composition/information on ingredients

#### 3.1 Substance / Preparation.

Cobalt (II) nitrate 6-hydrate

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

CAS No : 10026-22-9

Molecular weight : 291.03

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

#### 3.2 Mixture.

Not applicable.

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#### 4. First-aid measures

##### 4.1 Description of first aid measures.

- Inhaling: Take the person out into the fresh air. If unconscious, seek urgent medical assistance.
- Skin contact: Remove contaminated clothing. Wash skin with water and soap or a suitable skin cleaner.  
Seek immediate medical advice.
- Eyes: Wash with plenty of water, keeping eyelids open. Seek immediate medical advice.
- Ingestion: Never induce vomiting. Seek immediate medical assistance.

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

Very Toxic Product, fatal if swallowed, contact with skin, inhaled. In extreme cases, unconsciousness.  
Immediate medical assistance is required.

##### 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. Seek immediate medical advice.

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#### 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.

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#### 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.

Product dangerous for the environment, 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.

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#### 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-authorized persons.

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

None.

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#### 8. Exposure controls/personal protection

##### 8.1 Control parameters.

The product does NOT contain substances with Professional Exposure Environmental Limit Values.  
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.

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#### 9. Physical and chemical properties

##### 9.1 Information on basic physical and chemical properties.

Appearance: Solid.

Colour:	Red crystals.
Odour:	No data available.
Odour threshold:	No data available.
pH value:	4.0 (10%, 20°C)
Melting Point:	57 °C
Boiling Point:	No data available.
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:	1330 g/l (0 °C)
Density:	No data available.
Relative density	1.87 g/cm <sup>3</sup>
Partition coefficient: n-octanol/water:	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	>74 °C
Viscosity :	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

#### 9.2 Other information.

None.

### 10. Stability and reactivity

#### 10.1 Reactivity.

The product does not present hazards by their reactivity.

#### 10.2 Chemical stability.

Sensitive to moisture.

#### 10.3 Possibility of hazardous reactions.

Neutralization can occur on contact with bases.

#### 10.4 Conditions to avoid.

Avoid contact with incompatible materials and improper handling.

#### 10.5 Incompatible materials.

Keep away from bases and oxidising agents.

#### 10.6 Hazardous decomposition products.

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

### 11. Toxicological information

#### 11.1 Information on toxicological effects.

Acute toxicity.	LD50 oral rat : 691mg/kg
Inhalation:	Based on available data, the classification criteria are not met.
Dermal:	Based on available data, the classification criteria are not met.
Ingestion:	Based on available data, the classification criteria are not met.
Corrosion:	Based on available data, the classification criteria are not met.
Irritation:	Based on available data, the classification criteria are not met.
Sensitization:	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Mutagenicity:	Suspected of causing genetic defects.
Carcinogenicity:	May cause cancer.
Toxic for reproduction:	May damage fertility or the unborn child.
STOT-single exposure:	Based on available data, the classification criteria are not met.
STOT-repeated exposure:	Based on available data, the classification criteria are not met.
Aspiration hazard:	Based on available data, the classification criteria are not met.

### 12. Ecological information

#### 12.1 Toxicity.

Toxicity to fish.

LC50 Carassius auratus : 66.8 mg/l; 96 h

Toxicity to Aquatic invertebrates.

EC50 Daphnia magna : 3.4 mg/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.

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**13. Disposal considerations**

13.1 Waste treatment methods.

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

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**14. Transport information**

14.1 UN number.

UN No: UN3077

14.2 UN proper shipping name.

ADR: UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COBALT NITRATE), 9, PG III, (E)

IMDG: UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COBALT NITRATE), 9, PG III

ICAO: UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COBALT NITRATE), 9, PG III

14.3 Transport hazard class(es).

Class(es): 9

14.4 Packing group.

Packing group: III

14.5 Environmental hazards.

Marine pollutant: Yes.

14.6 Special precautions for user.

Labels: 9

Hazard number: 90

ADR LQ: 5 kg

IMDG LQ: 5 kg

ICAO LQ: 5 kg

Provisions concerning carriage in bulk ADR: Not authorized carriage in bulk in accordance with ADR.

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

Proceed in accordance with point 6.

IMDG Code segregation group: 11 Mercury and mercury compounds.

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

The product is not transported in bulk.

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**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.

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**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%.

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. 1.0

Date published.  
26-May-2017  
Further information.  
None.

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

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