

Safety Data Sheet **COBALT (II) THIOCYANATE Anhydrous**

SDS no. LUBM89LE • Version 1.0 • Date of issue: 2024-10-23

SECTION 1: Identification

GHS Product identifier

Product name COBALT (II) THIOCYANATE Anhydrous

Other means of identification

Product Product Code

Cobaltous thiocyanate, Cobaltous sulfocyanate, Cobaltous rhodanate, Cobaltous rhodanide
COBALT (II) THIOCYANATE Anhydrous LR CL414

Recommended use of the chemical and restrictions on use

Humidity indicator and laboratory reagent.

Supplier's details

Name ChemSupply Australia Pty Ltd
Address 38-50 Bedford Street
5013 Gillman South Australia
Australia

Telephone 08 8440 2000
email www.chemsupply.com.au

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

General hazard statement

Classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

- Acute toxicity, oral, Cat. 4
- Carcinogenicity, Cat. 1B
- Respiratory sensitizer, Cat. 1
- Serious eye damage/eye irritation, Cat. 2A

Safety Data Sheet

COBALT (II) THIOCYANATE Anhydrous

SDS no. LUBM89LE • Version 1.0 • Date of issue: 2024-10-23

- Skin sensitizer, Cat. 1
- Specific target organ toxicity following repeated exposure, Cat. 1

GHS label elements, including precautionary statements

Pictograms



Signal word

Danger

Hazard statement(s)

H302	Harmful if swallowed
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H350	May cause cancer
H372	Causes damage to organs through prolonged or repeated exposure

Precautionary statement(s)

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	[In case of inadequate ventilation] wear respiratory protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of water/soap
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor/physician
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container to an approved waste disposal facility

SECTION 3: Composition/information on ingredients

Mixtures

Molecular weight: 175.09

Components

Component	CAS no.	Concentration
Cobalt (II) thiocyanate (EC no.: 221-156-8)	3017-60-5	<= 100 % (weight)
CLASSIFICATIONS: Acute toxicity, oral, Cat. 4; Carcinogenicity, Cat. 1B; Respiratory sensitizer, Cat. 1; Serious eye damage/eye irritation, Cat. 2A; Skin sensitizer, Cat. 1; Specific target organ toxicity following repeated exposure, Cat. 1; Toxic to reproduction, Cat. 1. HAZARDS: H302 - Harmful if swallowed; H317 - May cause an allergic skin reaction; H319 - Causes serious eye irritation; H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled; H350 - May cause cancer [route]; H360 - May damage fertility or the unborn child [effect, route]; H372 - Causes damage to organs [organs] through prolonged or repeated exposure [route].		

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	First Aid Facilities: Maintain eyewash fountain in work area.
If inhaled	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.
In case of skin contact	Wash affected areas with copious quantities of water immediately. Remove contaminated clothing and wash before re-use. If rapid recovery does not occur, obtain medical attention
In case of eye contact	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. In all cases of eye contamination it is a sensible precaution to seek medical advice.
If swallowed	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek medical advice if effects persist.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary

For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

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

Large fire: Use water spray, fog or foam - Do NOT use water jets. Cool containers with flooding quantities of water until well after the fire is out. Avoid getting water inside the containers.

Specific hazards arising from the chemical

Hazards from Combustion Products: May liberate toxic fumes in fire.

Material does not burn. Fire or heat will produce irritating, poisonous and/or corrosive gases. Runoff may pollute waterways.

Special protective actions for fire-fighters

Wear SCBA and chemical splash suit. Fully encapsulating, gas-tight suits should be worn for maximum protection. Structural firefighter's uniform is NOT effective for these materials.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid substance contact. Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms.

Wear protective clothing specified for normal operations (see Section 8)

Methods and materials for containment and cleaning up

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.

SECTION 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. Wash hands and face thoroughly after working with material. Contaminated clothing should be removed and washed before reuse.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed and in a cool, dry, well-ventilated place, away from direct sunlight and other sources of heat or ignition. Keep away from moisture.

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face 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.

Skin protection

Hand Protection: Ensure hand protection complies with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Body protection

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.

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.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Solid
Appearance	Yellow-brown powder.
Color	No data available.
Odor	Odourless.
Odor threshold	No data available.
Melting point/freezing point	No data available.
Boiling point or initial boiling point and boiling range	No data available.
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	No data available.
Explosive properties	No data available.
Auto-ignition temperature	No data available.

Safety Data Sheet

COBALT (II) THIOCYANATE Anhydrous

SDS no. LUBM89LE • Version 1.0 • Date of issue: 2024-10-23

Decomposition temperature
Oxidizing properties
pH
Kinematic viscosity
Solubility

No data available.
No data available.
No data available.
No data available.
Solubility in Water: Soluble. Solubility in Organic Solvents:
Soluble in ethanol, methanol, ether, acetone, and chloroform.
No data available.
No data available.
No data available.
No data available.
No data available.
No data available.
No data available.

Partition coefficient n-octanol/water (log value)
Vapor pressure
Evaporation rate
Density and/or relative density
Relative vapor density
Particle characteristics

Supplemental information regarding physical hazard classes

No data available.

Further safety characteristics (supplemental)

No data available.

SECTION 10: Stability and reactivity

Reactivity

Stable under normal conditions of storage and handling.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Contact with acids liberates very toxic gas.

Conditions to avoid

Exposure to direct sunlight. Exposure to moisture. Incompatibles.

Incompatible materials

Moisture, acids and oxidising agents.

Hazardous decomposition products

Hydrogen cyanide and sulfur oxides.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Ingestion: Harmful if swallowed. May cause nausea, headache and vomiting.

Inhalation: May cause irritation of respiratory tract.

Skin corrosion/irritation

May cause sensitisation by skin contact. May cause dermatitis upon prolonged exposure.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Safety Data Sheet

COBALT (II) THIOCYANATE Anhydrous

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Respiratory sensitisation: Sensitization - Respiratory: Category 1 - Safe Work Australia.

Skin Sensitisation: Sensitization - Skin: Category 1 - Safe Work Australia.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

The International Agency for Research on Cancer (IARC) indicates there is limited evidence for carcinogenicity of cobalt (II) chloride in experimental animals, and has assigned cobalt and cobalt compounds as possibly carcinogenic to humans (group 2B).

Carcinogenicity: Category 1B - Safe Work Australia.

Reproductive toxicity

Toxic to Reproduction: Category 1B - Safe Work Australia.

Specific target organ toxicity (STOT) - single exposure

Not classified based on available information.

Specific target organ toxicity (STOT) - repeated exposure

Specific Target Organ Toxicity - Repeated Exposure: Category 1 - Safe Work Australia.

Aspiration hazard

Not classified based on available information.

Additional information

[2K] Chronic Effects: Systemic effect: Damage to kidneys.

SECTION 12: Ecological information

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail)

UN Number: 3288

Class: 6.1

Packing Group: III

Proper Shipping Name: TOXIC SOLID, INORGANIC, N.O.S. (COBALT (II) THIOCYANATE)

Environmentally Hazardous

Hazchem emergency action code (EAC)

2X

IMDG

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IATA

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Environmentally Hazardous

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP

Poison Schedule: NS

SECTION 16: Other information

Further information/disclaimer

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.

Preparation information

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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', July 2020.

Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.

Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants, December 2019

Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)