

Material Safety Data Sheet

Date Printed: 04/24/2004 Date Updated: 03/07/2004 Version 1.30

Section 1 - Product and Company Information

Product Name Product Number Brand

Mercury(II) tetrathiocyanatocobaltate(II), 99.99%

Aldrich Chemical

Company Street Address City, State, Zip, Country Technical Phone:

Sigma-Aldrich 3050 Spruce Street

SAINT LOUIS, MO 63103 US

314 771 5765 800 325 5052 **Emergency Phone:**

414 273 3850 Ext. 5996

Section 2 - Composition/Information on Ingredient

SARA 313 EC no Annex I Index Substance Name CAS# Number 27685-51-4 248-602-4

MERCURY(II) TETRATHIOCYANATOCOBALTATE(II),99.99%

Formula Synonyms

Fax:

HgCo(SCN)4

Section 3 - Hazards Identification

Emergency Overview

Highly Toxic (USA) Toxic (EU).

Toxic by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.

Readily absorbed through skin. Neurological hazard. Target organ(s): Kidneys. G.I. System.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Immediate Treatment - Work Site

In case of contact, immediately flush eyes or skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes.

Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

Inhalation Exposure

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

Section 5 - Fire Fighting Measures

Autoignition Temp:

Extinguishing Media

Suitable

Noncombustible. Use extinguishing media appropriate to surrounding fire conditions.

Firefighting

Protective Equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s)

Emits toxic fumes under fire conditions.

Exposure Hazard(s)

Material

Irritant.

Section 6 - Accidental Release Measures

Procedure to be Followed in Case of Leak or Spill

Evacuate area.

Procedure(s) of Personal Precaution(s)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Wear disposable coveralls and discard them after

Methods for Cleaning Up

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is

Section 7 - Handling and Storage

Handling

Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid all contact.

Storage

Suitable

Keep tightly closed. Store in a cool dry place.

Section 8 - Exposure Controls / PPE

Engineering Controls

Safety shower and eye bath. Use only in a chemical fume hood.

Personal Protective Equipment

Other

Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

General Hygiene Measures

Wash thoroughly after handling. Wash contaminated clothing before reuse.

Section 9 - Physical/Chemical Properties

Appearance

Molecular Weight:

491.85 AMU

BP/BP Range

N/A N/A N/A

MP/MP Range

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Freezing Point N/A Vapor Pressure N/A Vapor Density N/A Saturated Vapor Conc. N/A SG/Density N/A **Bulk Density** N/A Odor Threshold N/A Volatile% N/A VOC Content N/A Water Content N/A Solvent Content N/A **Evaporation Rate** N/A Viscosity N/A **Partition Coefficient** N/A Decomposition Temp. N/A Flash Point °F N/A Flash Point °C N/A **Explosion Limits** N/A Flammability N/A **Autoignition Temp** N/A Solubility N/A

N/A = not available

Section 10 - Stability and Reactivity

Stability

Materials to Avoid

Strong oxidizing agents, Strong acids.

Hazardous Decomposition Products

Hazardous Decomposition Products

Carbon monoxide, Carbon dioxide, Nitrogen oxides, Sulfur oxides, Mercury/mercury oxides.

Section 11 - Toxicological Information

Route of Exposure

Inhalation

Material is irritating to mucous membranes and upper respiratory tract.

Multiple Routes

May be fatal if inhaled, swallowed, or absorbed through skin. Causes eye and skin irritation.

Target Organ(s) or System(s)

Kidneys. G.I. System. Nerves.

Conditions Aggravated by Exposure

May cause nervous system disturbances.

RTECS Number: N/A

Section 12 - Ecological Information

No data available

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

Treat a dilute basic solution (pH 10-11) of the material with a 50% excess of commercial laundry bleach. Control the temperature by the addition rate of bleach and adjust pH if necessary. Let stand overnight. Cautiously adjust solution to pH 7. Vigorous evolution of gas may occur. Filter any solids for burial in a chemical landfill. Precipitate any heavy metals by addition of sulfide and isolate for

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Sigma-Aldrich Corporation www.sigma-aldrich.com burial. Additional equivalents of hypochlorite may be needed if the metal can be oxidized to a higher valence state. For metal carbonyls, the reaction should be carried out under nitrogen.

Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: Mercury compounds, solid, n.o.s.

UN#: 2025 Class: 6.1

Packing Group: Packing Group II Hazard Label: Toxic substances.

PIH: Not PIH

IATA

Proper Shipping Name: Mercury compound, solid, n.o.s.

IATA UN Number: 2025 Hazard Class: 6.1 Packing Group: II

Section 15 - Regulatory Information

EU Additional Classification

Symbol of Danger: T

Indication of Danger

Toxic

Risk Statements

R: 23/24/25 36/37/38

Toxic by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.

Safety Statements S: 22 26 36/37/39 45

Do not breathe dust. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US Classification and Label Text

Indication of Danger

Highly Toxic (USA) Toxic (EU).

Risk Statements

Toxic by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.

Safety Statements

Do not breathe dust. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US Statements

Readily absorbed through skin, Neurological hazard. Target organ(s): Kidneys. G.I. System.

United States Regulatory Information

SARA Listed: Yes

Notes: This product is subject to SARA section 313 reporting requirements. This product is subject to SARA section 313 reporting requirements.

United States - State Regulatory Information

California Prop - 65

This product is or contains chemical(s) known to the state of California to cause developmental toxicity.

Canada Regulatory Information

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: Yes NDSL: No

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Section 16 - Other Information

Disclaimer

For R&D use only. Not for drug, household or other uses.

Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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