

# MATERIAL SAFETY DATA SHEET

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Hazardous according to the criteria of NOHSC Australia.

## I IDENTIFICATION

Product Name: Cobalt Sulfate

Other Names: None.

Product Code: None.

UN No: None allocated

Hazchem Code: None allocated

Dangerous Goods Class: None allocated

Sub Risk Class: None allocated

Packaging Group: None allocated

Poison Schedule: Not scheduled.

Chemical Family: Cobalt salt of mineral acid

Uses: Chemical intermediate used in storage batteries; in electroplating; in pigment manufacture.

## Physical Appearance & Properties

Appearance & Odour: Red to blue crystals depending on degree of hydration.

Melting/softening point: Decomposes at 708°C without melting.

Boiling point and vapour pressure: Not applicable.

Volatile materials: No specific data. Expected to be low at 100°C.

Flashpoint: Does not burn.

Specific gravity: 3.1 approx

Solubility in water: Soluble.

Corrosiveness: Not corrosive.

## Ingredients

Chemical Entity

CAS No

Proportion, %

Worksafe Exposure Limits

Cobalt sulphate

10124-43-3

pure \*

TWA, mg/m<sup>3</sup> STEL, mg/m<sup>3</sup>

not set

not set

\* Commercially pure.

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

## II HEALTH HAZARD DATA

### Health Effects:

No specific data is available for the product for chronic exposure symptoms. The ingredients are not listed as carcinogenic in Worksafe's document "Exposure Standards for Atmospheric Contaminants in the Occupational Environment" (May 1995).

### Acute Effects:

Swallowed: Data suggests that this product is harmful if swallowed.

Eye: This product is mildly irritating to the eyes. It is likely to cause mild discomfort such as watering and redness of the eyes. However, this should quickly disappear once exposure is over.

Skin: This product is mildly irritating to skin. However, it is unlikely to cause more than minor discomfort or effects such as itchiness, occasional small blisters or slight skin reddening.

Inhalation: Data suggests that this product should present no significant problems.

### First Aid:

If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 13 1126 from anywhere in Australia.

Eyes: If product gets in eyes, wash material from them with running water. If they begin watering or reddening, take special care in washing thoroughly.

Skin: If product gets on skin, thoroughly wash contacted areas. No further measures should normally be required unless irritation is noticed. If irritation persists, seek medical attention.

Inhalation: No first aid measures normally required. However, if vapours or dusts have been inhaled, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

Advice to Doctor: Treat symptomatically. Note the nature of this product.

## MATERIAL SAFETY DATA SHEET

### III PRECAUTIONS FOR USE

Risk Phrases are: R40/22. Harmful: possible risk of irreversible effects if swallowed.

#### Exposure Standards:

A time weighted average (TWA) concentration for an 8 hour day, and 5 day week has not been established by NOHSC Australia for any of the major ingredients in this product. There is a blanket limit of 10mg/m<sup>3</sup> for dusts or mists when limits have not otherwise been established.

#### Engineering Controls:

In industrial situations, concentration values below the TWA value should be maintained. Values may be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify the process or environment to reduce the problem.

#### Personal Protection:

Respiratory Protection: It is usually safe to not use a dust mask or respirator protection on account of this product. However, if the product is being used in dusty or confined conditions, use of a mask or respirator may be preferred. For help in selecting suitable equipment, consult AS/NZS 1715.

Protective Gloves: Impermeable protective gloves should be worn when you are using this product, to prevent irritation. For help in selecting suitable equipment, consult AS 2161.

Eye Protection: Protective eyewear is suggested when using this product. It is always prudent to use protective eyewear. Consult AS1336 and AS/NZS 1337 for advice on Industrial Eye Protection.

Clothing: Clean overalls or protective clothing should be worn, preferably with an apron. Consult AS2919 for advice on Industrial Clothing.

Safety Boots: Wearing safety boots in industrial situations is advisory. Consult AS/NZS2210 for advice on Occupational Protective Footwear.

Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

### IV SAFE HANDLING INFORMATION

Safety Phrases are: S20. When using, do not eat or drink.

#### Storage & Transport

No special storage and transport requirements. This product has no UN classification. Not a Scheduled Poison. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames, and make sure that the product does not come into contact with substances listed under "Materials to avoid" below.

#### Spills & Disposals

In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing including face mask, face shield and gauntlets. All skin areas should be covered. Thoroughly launder protective clothing before storage or re-use. See above under Personal Protection regarding Australian Standards relating to personal protective equipment. Stop leak if safe to do so, and contain spill. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage. Recycle containers wherever possible. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. This material may be suitable for approved landfill. Dispose of only in accord with all regulations. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

#### Fire & Explosion Hazard

There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

Flashpoint: Does not burn.

Flammability limits: Not applicable. This product does not burn.

Extinguishing Media: This product does not burn. Use extinguishing media suited to the materials that are burning.

Special Fire Fighting procedures: When fighting fires involving significant quantities of this product, wear safety boots, non-flammable overalls, gloves, hat and preferably, goggles.

Unusual Fire & Explosion Hazards: Fire decomposition products from this product may form irritating mixtures in confined spaces.

Stability: This product is unlikely to spontaneously decompose.

Polymerisation: This product is unlikely to spontaneously polymerise.

Decomposition Products: Oxides of sulfur (sulfur dioxide is a respiratory hazard) and other sulfur compounds, water, cobalt compounds.

Materials to avoid: strong bases, ammonia and its solutions. Cobalt salts are used to catalyse some polymerisation reactions such as in polyester fabrication processes. Avoid contact with this type of reagent and process.

## MATERIAL SAFETY DATA SHEET

### V OTHER INFORMATION

This MSDS is prepared in accord with the Worksafe Australia document "National Code of Practice for the Preparation of Material Safety Data Sheets", 1994.

Contact Points:

**Police and Fire Brigade:**

**Dial**

AUSTRALIA

**000**

**If ineffective:**

**Dial**

**1100 (Exchange)**

**National Poisons Information Centre:**

**Dial**

**13 1126 (from anywhere in Australia)**

THIS MSDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER SHOULD READ THIS MSDS AND CONSIDER THE INFORMATION IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE INCLUDING IN CONJUNCTION WITH OTHER PRODUCTS. IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY. THE RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

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