

# Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 12.04.2017

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## Cobalt Nitrate, Hexahydrate

### SECTION 1: Identification

#### Product identifier

**Product name:** Cobalt Nitrate, Hexahydrate

**Product code:** S25261B

#### Recommended use of the product and restriction on use

**Relevant identified uses:** Not determined or not applicable.

**Uses advised against:** Not determined or not applicable.

**Reasons why uses advised against:** Not determined or not applicable.

#### Manufacturer or supplier details

##### Manufacturer:

AquaPhoenix Scientific  
860 Gitts Run Road  
Hanover  
PA 17331  
(717) 632-1291

##### Supplier:

Fisher Science Education  
6771 Silver Crest Road  
Nazareth  
PA 18064  
800 955-1177

#### Emergency telephone number:

##### United States

Emergency Telephone No.: 800-255-3924

### SECTION 2: Hazard identification

#### GHS classification:

Oxidizing solids, category 2

Acute toxicity (oral), category 4

Skin sensitization, category 1

Respiratory sensitization, category 1

Germ cell mutagenicity, category 2

Carcinogenicity, category 1B

Reproductive toxicity, category 1B

Acute aquatic hazard, category 1

Chronic aquatic hazard, category 1

#### Label elements

##### Hazard pictograms:



**Signal word:** Danger

#### Hazard statements:

H272 May intensify fire; oxidizer

H302 Harmful if swallowed

H317 May cause an allergic skin reaction

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- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H341 Suspected of causing genetic defects
- H350 May cause cancer
- H360 May damage fertility or the unborn child
- H400 Very toxic to aquatic life
- H410 Very toxic to aquatic life with long lasting effects

### Precautionary statements:

- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking
- P220 Keep/Store away from clothing/combustible materials
- P221 Take any precaution to avoid mixing with combustibles
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P264 Wash skin thoroughly after handling
- P270 Do not eat, drink or smoke when using this product
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P272 Contaminated work clothing should not be allowed out of the workplace
- P285 In case of inadequate ventilation wear respiratory protection
- P201 Obtain special instructions before use
- P202 Do not handle until all safety precautions have been read and understood
- P273 Avoid release to the environment
- P370+P378 In case of fire: Use agents recommended in section 5 for extinction
- P301+P330+P312 IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.
- P321 Specific treatment (see supplemental first aid instructions on this label).
- P363 Wash contaminated clothing before reuse
- P302+P352 If on skin: Wash with soap and water
- P333+P313 If skin irritation or a rash occurs: Get medical advice/attention
- P304+P341 If inhaled: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
- P308+P313 If exposed or concerned: Get medical advice/attention
- P391 Collect spillage
- P405 Store locked up
- P501 Dispose of contents and container as instructed in Section 13

**Hazards not otherwise classified:** None

## SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 10026-22-9	Cobalt Nitrate	100

**Additional Information:** None

## SECTION 4: First-aid measures

### Description of first-aid measures

#### General notes:

Not determined or not available.

#### After inhalation:

Loosen clothing as necessary and position individual in a comfortable position

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Maintain an unobstructed airway

### After skin contact:

Rinse affected area with soap and water  
If symptoms develop or persist, seek medical attention  
Wash affected area with soap and water  
Seek medical attention if symptoms develop or persist

### After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes  
If symptoms develop or persist, seek medical attention  
Remove contact lens(es) if able to do so during rinsing  
Seek medical attention if irritation persists or if concerned

### After ingestion:

Rinse mouth thoroughly  
Seek medical attention if irritation, discomfort, or vomiting persists  
Call a POISON CONTROL CENTER or seek medical attention if you feel unwell  
Do not induce vomiting  
Rinse mouth and then drink plenty of water

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

#### Acute symptoms and effects:

Not determined or not available.

#### Delayed symptoms and effects:

Not determined or not available.

### Immediate medical attention and special treatment

#### Specific treatment:

Not determined or not available.

#### Notes for the doctor:

Not determined or not available.

## SECTION 5: Fire-fighting measures

### Extinguishing media

#### Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

#### Unsuitable extinguishing media:

Not determined or not applicable.

### Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

### Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing  
Refer to Section 8

### Special precautions:

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols  
Avoid contact with skin, eyes and clothing

## SECTION 6: Accidental release measures

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### Personal precautions, protective equipment and emergency procedures:

- Ensure adequate ventilation
- Ensure air handling systems are operational
- Wear protective eye wear, gloves and clothing

### Environmental precautions:

- Should not be released into the environment
- Prevent from reaching drains, sewer or waterway

### Methods and material for containment and cleaning up:

- Wear protective eye wear, gloves and clothing

### Reference to other sections:

- Not determined or not applicable.

## SECTION 7: Handling and storage

### Precautions for safe handling:

- Do not eat, drink, smoke or use personal products when handling chemical substances.
- Avoid breathing mist or vapor.

### Conditions for safe storage, including any incompatibilities:

- Store in a cool, well-ventilated area.

## SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

### Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Cobalt Nitrate	10026-22-9	ACGIH TLV: 0.02 mg/m <sup>3</sup> as Co

### Biological limit values:

- No biological exposure limits noted for the ingredient(s).

### Information on monitoring procedures:

- Not determined or not applicable.

### Appropriate engineering controls:

- Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

### Personal protection equipment

#### Eye and face protection:

- Safety goggles or glasses, or appropriate eye protection.

#### Skin and body protection:

- Select glove material impermeable and resistant to the substance.

#### Respiratory protection:

- When necessary, use NIOSH-approved breathing equipment.

### General hygienic measures:

- Wash hands before breaks and at the end of work.
- Avoid contact with skin, eyes and clothing.

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### SECTION 9: Physical and chemical properties

#### Information on basic physical and chemical properties

<b>Appearance (physical state, color):</b>	Red solid
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	Not determined or not available.
<b>pH-value:</b>	Not determined or not available.
<b>Melting/Freezing point:</b>	55°C
<b>Boiling point/range:</b>	Decomposes at 74°C
<b>Flash point:</b>	Not determined or not available.
<b>Evaporation rate:</b>	Not determined or not available.
<b>Flammability (solid, gaseous):</b>	Not determined or not available.
<b>Explosion limit upper:</b>	Not determined or not available.
<b>Explosion limit lower:</b>	Not determined or not available.
<b>Vapor pressure:</b>	Not determined or not available.
<b>Vapor density:</b>	Not determined or not available.
<b>Density:</b>	Not determined or not available.
<b>Relative density:</b>	1.8 g/cm <sup>3</sup>
<b>Solubilities:</b>	Soluble in water.
<b>Partition coefficient (n-octanol/water):</b>	Not determined or not available.
<b>Auto/Self-ignition temperature:</b>	Not determined or not available.
<b>Decomposition temperature:</b>	74°C
<b>Dynamic viscosity:</b>	Not determined or not available.
<b>Kinematic viscosity:</b>	Not determined or not available.
<b>Explosive properties</b>	Not determined or not available.
<b>Oxidizing properties</b>	Not determined or not available.

#### Other information

<b>Molecular Weight</b>	291.03
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### SECTION 10: Stability and reactivity

#### Reactivity:

Does not react under normal conditions of use and storage.

#### Chemical stability:

No decomposition if used and stored according to specifications. Stable under normal temperatures and pressures. May decompose if heated. Deliquescent (tending to absorb atmospheric water vapor and become liquid).

#### Possibility of hazardous reactions:

None under normal conditions of use and storage.

#### Conditions to avoid:

Store away from oxidizing agents, strong acids or bases. Dust generation, moisture, excessive heat.

#### Incompatible materials:

Reducing agents, combustible organics.

#### Hazardous decomposition products:

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Nitrogen oxides, oxygen, oxides of cobalt.

### SECTION 11: Toxicological information

#### Acute toxicity

**Assessment:** Harmful if swallowed

**Product data:** No data available.

**Substance data:** No data available.

#### Skin corrosion/irritation

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:**

Name	Result
Cobalt Nitrate	Causes skin irritation.

#### Serious eye damage/irritation

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:**

Name	Result
Cobalt Nitrate	Causes serious eye irritation.

#### Respiratory or skin sensitization

**Assessment:** May cause an allergic skin reaction May cause allergy or asthma symptoms or breathing difficulties if inhaled

**Product data:** No data available.

**Substance data:** No data available.

#### Carcinogenicity

**Assessment:** May cause cancer

**Product data:** No data available.

**Substance data:** No data available.

**International Agency for Research on Cancer (IARC):**

Name	Classification
Cobalt Nitrate	Group 2B

**National Toxicology Program (NTP):** None of the ingredients are listed.

#### Germ cell mutagenicity

**Assessment:** Suspected of causing genetic defects

**Product data:** No data available.

**Substance data:**

Name	Result
Cobalt Nitrate	Suspected of causing genetic defects

#### Reproductive toxicity

**Assessment:** May damage fertility or the unborn child

**Product data:** No data available.

**Substance data:**

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Name	Result
Cobalt Nitrate	Suspected of damaging fertility or the unborn child

### Specific target organ toxicity (single exposure)

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Specific target organ toxicity (repeated exposure)

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Aspiration toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**Information on likely routes of exposure:** No data available.

**Symptoms related to the physical, chemical and toxicological characteristics:** No data available.

**Other information:** No data available.

## SECTION 12: Ecological information

### Acute (short-term) toxicity

**Assessment:** Very toxic to aquatic life

**Product data:** No data available.

**Substance data:** No data available.

### Chronic (long-term) toxicity

**Product data:** No data available.

**Substance data:** No data available.

### Persistence and degradability

**Product data:** No data available.

**Substance data:** No data available.

### Bioaccumulative potential

**Product data:** No data available.

**Substance data:** No data available.

### Mobility in soil

**Product data:** No data available.

**Substance data:** No data available.

**Other adverse effects:** No data available.

## SECTION 13: Disposal considerations

### Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

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## Cobalt Nitrate, Hexahydrate

### SECTION 14: Transport information


#### Canadian Transportation of Dangerous Goods (TDG)

UN number	UN1477
UN proper shipping name	Nitrates, inorganic, n.o.s.
UN transport hazard class(es)	5.1 
Packing group	II
Environmental hazards	None
Special precautions for user	None

#### International Maritime Dangerous Goods (IMDG)

UN number	UN1477
UN proper shipping name	Nitrates, inorganic, n.o.s.
UN transport hazard class(es)	5.1 
Packing group	II
Environmental hazards	None
Special precautions for user	None

#### International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN1477
UN proper shipping name	Nitrates, inorganic, n.o.s.
UN transport hazard class(es)	5.1 
Packing group	II
Environmental hazards	None
Special precautions for user	None

### SECTION 15: Regulatory information

#### Canada regulations

##### Domestic substances list (DSL):

10026-22-9	Cobalt Nitrate	Not Listed
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Non-domestic substances list (NDSL): Not determined.

### SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:



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### Cobalt Nitrate, Hexahydrate

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

**NFPA:** 2-0-0-ox

**HMIS:** 2-0-0-X

**Initial preparation date:** 12.04.2017

**End of Safety Data Sheet**