

Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 01.12.2018

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Cobalt Oxide

SECTION 1: Identification

Product identifier

Product name: Cobalt Oxide

Product code: CO1400

Recommended use of the product and restriction on use

Relevant identified uses: Laboratory Chemicals

Uses advised against: Not determined or not applicable.

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

Manufacturer or supplier details

Manufacturer:

United States

AquaPhoenix Scientific, Inc.
860 Gitts Run Road
Hanover, PA 17331
1-717-632-1291

Emergency telephone number:

United States

ChemTel Inc

+1(800)255-3924

+1(813)248-0585

SECTION 2: Hazard identification

GHS classification:

Skin sensitization, category 1

Respiratory sensitization, category 1

Carcinogenicity, category 1A

Chronic aquatic hazard, category 2

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H317 May cause an allergic skin reaction

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

H350 May cause cancer

H411 Toxic to aquatic life with long lasting effects

Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

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P272 Contaminated work clothing should not be allowed out of the workplace
P280 Wear protective gloves/protective clothing/eye protection/face protection
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
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: 1308-06-1 | Cobalt oxide | 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
Maintain an unobstructed airway
Get medical advice/attention if you feel unwell

After skin contact:

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

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes
If symptoms develop or persist, seek medical attention

After ingestion:

Rinse mouth thoroughly
Seek medical attention if irritation, discomfort, or vomiting persists

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not available.

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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:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:

Carbon monoxide and carbon dioxide may form upon combustion

Heating causes a rise in pressure, risk of bursting and combustion

SECTION 6: Accidental release measures

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

Sweep or scoop up solid material while minimizing dust generation

Dispose of contents / container in accordance with local regulations

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Use only with adequate ventilation.

Avoid breathing dust.

Do not eat, drink, smoke or use personal products when handling chemical substances.

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Conditions for safe storage, including any incompatibilities:

- Keep container tightly sealed.
- Keep container dry.
- 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 oxide | 1308-06-1 | TLV 8-Hour TWA: 0.02 mg/m ³ |
| | Cobalt oxide | 1308-06-1 | Biological occupational exposure limits: 15 µg/l |
| United States (OSHA) | Cobalt oxide | 1308-06-1 | OSHA PEL 8-Hour TWA: 0.1 mg/m, as Cobalt |
| NIOSH | Cobalt oxide | 1308-06-1 | NIOSH REL TWA: 0.05 mg/m ³ |

Biological limit values:

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

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

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.
Wear appropriate clothing to prevent any possibility of skin contact.

Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

General hygienic measures:

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

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

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| | |
|---|--------------------|
| Appearance (physical state, color): | Powder |
| Odor: | Odorless |
| Odor threshold: | Not determined |
| pH-value: | Not determined |
| Melting/Freezing point: | 895°C |
| Boiling point/range: | Not determined |
| Flash point: | Not determined |
| Evaporation rate: | Not determined |
| Flammability (solid, gaseous): | Not determined |
| Explosion limit upper: | Not determined |
| Explosion limit lower: | Not determined |
| Vapor pressure: | Not determined |
| Vapor density: | Not determined |
| Density: | Not determined |
| Relative density: | 6.11 g/mL at 25°C |
| Solubilities: | Insoluble in water |
| Partition coefficient (n-octanol/water): | Not determined |
| Auto/Self-ignition temperature: | Not determined |
| Decomposition temperature: | Not determined |
| Dynamic viscosity: | Not determined |
| Kinematic viscosity: | Not determined |
| Explosive properties | Not determined |
| Oxidizing properties | Not determined |

Other information

| | |
|-------------------------|--------|
| Molecular weight | 240.80 |
|-------------------------|--------|

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

None known.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

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Acute toxicity

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

Product data: No data available.

Substance data:

| Name | Route | Result |
|--------------|-------|--------------------------------|
| Cobalt oxide | oral | LD50 Rat: > 5gm/kg (5000mg/kg) |

Skin corrosion/irritation

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

Product data: No data available.

Substance data: No data available.

Serious eye damage/irritation

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

Product data: No data available.

Substance data: No data available.

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 oxide | Group 2B |

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

Germ cell mutagenicity

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

Product data: No data available.

Substance data: No data available.

Reproductive toxicity

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 (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.

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

Product data: No data available.

Substance data:

| Name | Result |
|--------------|------------------------|
| Cobalt oxide | LC50 (96 h):15.98 mg/l |

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

SECTION 14: Transport information

Canadian Transportation of Dangerous Goods (TDG)

| | |
|-------------------------------|---------------|
| UN number | Not regulated |
| UN proper shipping name | Not regulated |
| UN transport hazard class(es) | None |
| Packing group | None |

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| | |
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| Environmental hazards | None |
| Special precautions for user | None |

International Maritime Dangerous Goods (IMDG)

| | |
|-------------------------------|---------------|
| UN number | Not regulated |
| UN proper shipping name | Not regulated |
| UN transport hazard class(es) | None |
| Packing group | None |
| Environmental hazards | None |
| Special precautions for user | None |

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

| | |
|-------------------------------|---------------|
| UN number | Not regulated |
| UN proper shipping name | Not regulated |
| UN transport hazard class(es) | None |
| Packing group | None |
| Environmental hazards | None |
| Special precautions for user | None |

SECTION 15: Regulatory information

Canada regulations

Domestic substances list (DSL):

| | | |
|-----------|--------------|--------|
| 1308-06-1 | Cobalt oxide | Listed |
|-----------|--------------|--------|

Non-domestic substances list (NDSL): Not determined.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with the Canadian Hazardous Products Regulations and WHMIS 2015. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 2-0-0

HMIS: 2-0-0

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End of Safety Data Sheet