

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: COBALT CARBONATE

Synonyms: Cobaltous carbonate; carbonic acid, cobalt salt

Product Uses: For animal feed applications

Product Uses Advised Against: Not for human consumption

Details of the supplier of the safety data sheet

Supplier Pestell Nutrition
Address 141 Hamilton Rd
New Hamburg, Ontario
Canada, N3A 2H1

Phone 519-662-2877
Email qa@pestell.com

Emergency telephone number Canada: CANUTEC 1 613-996-6666
(24 hr) US: CHEMTREC 1 703-527-3887

2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity, Oral (Category 4)

Skin irritation (Category 2)

Eye irritation (Category 2A)

Skin sensitisation (Category 1)

Carcinogenicity (Category 2)

Specific target organ toxicity - single exposure (Category 3)

Label elements

Pictogram



Signal word: DANGER

Hazard Statements:

- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.

Precautionary Statements:

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P280 Wear protective gloves.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. occurs: Get medical advice/attention.

HMIS Classification

Health hazard: 2

Chronic Health Hazard: *

Flammability: 0

Physical hazards: 0

Most important hazards: Harmful if swallowed. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Suspected of causing cancer by inhalation. Causes damage to the respiratory system. Causes damage to the blood, the kidneys and to the thyroid through prolonged or repeated exposure.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS-No.	EC-No.	Index-No.	Concentration
Cobalt(II) carbonate hydrate			
513-79-1	208-169-4	-	<=100%

Ingredients or impurities that contribute to the hazard: Doesn't have impurities that contribute to the hazard (pure substance).

Formula : $\text{CoCO}_3 \cdot x\text{H}_2\text{O}$

Molecular weight : 118.94 g/mol

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion: Rinse the mouth of the victim with water. Provide plenty of water for the victim to drink if it is conscious. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact: Wipe off excess material from skin then immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed: After inhalation, the victim may present cough, shortness of breath and asthma symptoms. On ingestion, abdominal pain, nausea, vomiting and diarrhea may occur. Contact with the eyes and skin, may cause, redness and pain. Allergic reactions may occur after skin contact.

Indication of any immediate medical attention and special treatment needed: Avoid contact with this product while helping the victim; keep the victim warmed. Symptomatic treatment should include, above all, measured of support as correction of hydro electrolytic and metabolic disturbances and respiratory failure.

5. FIREFIGHTING MEASURES

Fire Extinguishing Media: Product is not combustible, compatible with all extinguishing media, such as dry chemical, water spray, carbon dioxide.

Unsuitable Extinguishing Media: N/A

Advice for firefighters: Use self-contained breathing apparatus (SCBA) operated in positive pressure mode and complete protective clothing. Keep containers cool with water spray.

Hazardous Combustion Products: Cobalt/cobalt oxides may be formed under fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Dust control: Apply ventilation or exhaust system. Moisten area to prevent dusting.

Prevention of inhalation, and skin, mucous membranes, and eye contact: Do not touch damage containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation and contact with skin and eyes. Use proper personal protective equipment as indicated in Section 8.

Environmental precautions: Prevent from entering into soil, waterways and groundwater.

Methods and material for containment and cleaning up: Use a vacuum cleaner to collect residue or another method that does not generate dust. Place the material into appropriate containers and remove to a safe place. Clean the area. Dispose in accordance with local regulation about residues.

7. HANDLING AND STORAGE

Precautions for safe handling: Handle in a well-ventilated area or with adequate general/local ventilation system. Use personal protective equipment as indicated on Section 8. Avoid inhaling product dust. Wash hands before eating and do not eat, drink, or smoke in workplace. Contaminated clothing shall be changed before reuse. Avoid contact with combustible and reducing agents.

Conditions for safe storage, including any incompatibilities: Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances (Strong oxidizers, tert-butyl hydroperoxide). Use plastic bag for packaging.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational Exposure Limits:

Ingredient	TLV - TWA (ACGIH)	PEL - TWA (OSHA)
	(mg/m ³)	(mg/m ³)
Cobalt	0.02	0.1

Biological Limits:

BEI (cobalt in urine) = 15pg/l

BEI (cobalt in blood) = 1pg/l

Appropriate engineering controls:

Provide general ventilation combined with local exhaust ventilation, in case of generation of mist product. Safety shower and eye bath available near work site. Engineering controls measures are the most effective way of reducing product exposure.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Use chemical safety goggles and/or a face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Skin and hand protection: Wear protective gloves and clean body-covering clothing.

Respiratory protection:

Use respiratory protective equipments against dust. In cases of high potential of exposure use a supplied-air respirator, full facepiece, operated in positive-pressure mode. Respirator can be used in combination with a self-contained breathing apparatus (SCBA), full facepiece, operated in positive-pressure mode, should be used too.

Thermal hazard: When heated may produce cobalt oxide and carbon monoxide

Environmental exposure controls: Prevent from entering into soil, waterways and groundwater.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Red crystalline powder.

Odor: Odorless.

pH: 7.0 - 9.0 (50% solution).

Melting point/freezing point: No information found.

Initial boiling point and boiling range: No information found.

Flash point: Not applicable.

Evaporation Rate (BuAc=1): No information found.

Flammability: Not flammable.

Upper/lower flammability or explosive limits: Not applicable.

Vapor Density (Air=1): No information found.

Vapor Pressure (mm Hg): No information found.

Relative density: No information found.

Solubility: Soluble in water and ethanol.

Partition coefficient: n-octanol/water: No information found.

Auto-ignition temperature: No information found.

Decomposition temperature: No information found.

Viscosity: Not applicable.

Explosive properties: No information found.

Oxidizing properties: No information found.

Other information: % Volatiles by volume at 21°C (70°F): 0.

10. STABILITY AND REACTIVITY

Chemical stability: Stable under ordinary conditions of use and storage. May air-oxidize. Do not suffer polymerization.

Possibility of hazardous reactions: When heated produces carbon dioxide.

Incompatible materials: Strong oxidizers.

Conditions to avoid: Air, incompatibles.

Hazardous decomposition Products: Burning may produce carbon monoxide, carbon dioxide, phosphorous oxides and benzoic acid.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Harmful if swallowed. LD₅₀ (oral, rat) = 640 mg/kg.

Skin corrosion/irritation: May cause skin irritation with redness, pain and skin rash.

Serious eye damage/irritation: May cause eye irritation with redness and pain. May cause conjunctivitis.

Respiratory or skin sensitization: May cause respiratory or skin sensitization. In case of allergy, future exposure to low quantities may cause skin reactions with redness, itching and rash. May cause rhinitis and asthma like symptoms, including shortness of breath and asphyxia.

Germ cell mutagenicity: There are no relevant data from germ cell mutagenicity.

Carcinogenicity: Cobalt and cobalt compounds: possibly carcinogen for humans (IARC - 2B)

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Reproductive toxicity: Animal studies show the possibility to damage fertility.

STOT-single exposure: Causes irritation to the respiratory tract, symptoms may include coughing and shortness of breath. May cause respiratory failure with pulmonary emphysema and fibrosis. May cause death if ingested in large amounts.

STOT-repeated exposure: Causes damage to the bone marrow with polycythemia, kidneys damage with blood in urine and thyroid damage with goiter.

Aspiration hazard: There is no data from aspiration hazard. Product is solid.

12. ECOLOGICAL INFORMATION

Toxicity: No data available.

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: No information found.

13. DISPOSAL CONSIDERATIONS

Product: The treatment and disposal should be evaluated specifically for each product. Can be deposited in landfills, sent to an appropriate incineration or other means of disposal provided they meet the requirements of local law.

Product waste: Keep the product remains in their original containers and properly sealed. Disposal should be performed as established for the product.

Contaminated packaging: Do not reuse empty containers. These may contain residues of the product and must be kept closed and sent for destruction in the appropriate place. In some cases the packaging should be returned to the registering company or supplier.

14. TRANSPORT INFORMATION

TDG (Canada)

UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Cobalt(II) carbonate)
Marine pollutant:yes

DOT (US)

UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Cobalt(II) carbonate)

IMDG

UN number: 3077 Class: 9 Packing group: III EMS-No: F-A
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Cobalt(II) carbonate)
Marine pollutant:yes

IATA

UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Cobalt(II) carbonate)

15. REGULATORY INFORMATION

WHMIS Classification

D2B Toxic Material Causing Other Toxic Effects Moderate skin irritant
Moderate eye irritant
Skin sensitiser

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

16. OTHER INFORMATION

Disclaimer

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. Pestell Nutrition and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

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