According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

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Cobalt Nitrate

SECTION 1: Identification

Product identifier

Product name: Cobalt Nitrate Product code: CN8000

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(s) 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

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

H341 Suspected of causing genetic defects

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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 applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway

After skin contact:

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

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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 swallowing:

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 applicable.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Not determined or not applicable.

SECTION 5: Firefighting 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

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

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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/m3 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.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Red solid
Odor	Odorless
Odor threshold	Not determined or not available.
рН	Not determined or not available.
Melting point/freezing point	55°C
Initial boiling point/range	Decomposes at 74°C
Flash point (closed cup)	Not determined or not available.

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Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	1.8 g/cm ³
Solubilities	Soluble in water.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	74°C
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

Molecular Weight

291.03

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:

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:

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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:

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.

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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)

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

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

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Listed

Cobalt Nitrate

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	11		
Environmental hazards	None		
Special precautions for user	None		

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

	•	
10026-22-9	Cobalt Nitrate	Not
		Listed

Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

SARA Section 311/312 hazards:

Acute	Chronic	Fire	Pressure	Reactive
No	No	No	No	No

SARA Section 302 extremely hazardous substances: Not determined.

SARA Section 313 toxic chemicals:

10026-22-9 Cobalt Nitra	Not Listed
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CERCLA: Not determined.

RCRA: Not determined.

Section 112(r) of the Clean Air Act (CAA): Not determined.

Massachusetts Right to Know:

	10026-22-9	Cobalt Nitrate	Listed
New Jersey Right to Know:			

10026-22-9Cobalt NitrateListed

New York Right to Know:

10026-22-9 Cobalt Nitrate

Pennsylvania Right to Know:

10026-22-9	Cobalt Nitrate	Not	
		Listed	
	•		

California Proposition 65: None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

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Disclaimer:

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