

Revision: 2.0
(Replaces revision 1.1 of 16 April 2021)Revision date: 20 April 2021
Date printed: 16 September 2024**Section 1. Identification**

1.1 Product Identifier CHE1620

Product Name COBALT (II) NITRATE 6H₂O pure 100g.

CAS Number 10026-22-9
REACH Registration No 01-2119542530-49-XXXX

Molecular Formula $\text{Co}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O} = 291.03$

1.2 Relevant identified uses of the substance or mixture & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Scientific Laboratory Supplies

Unit 6, Foresters Avenue
Fairham Business Park
Fairham
Nottingham
NG11 2AF
UNITED KINGDOM

Phone 0115 9821111
Fax 0115 9825275
Email sales@scientific-labs.com

1.4 Emergency Telephone (08:00-17:00) 0115 9821111
(24hr) 112
(Have this document to hand)

Section 2. Hazards Identification**2.1 Classification of the substance or mixture****Classification according to regulation 1272/2008/EC**

| | |
|---|--|
| Oxidising solid, category 2 | H272: May intensify fire; oxidizer. |
| Acute toxicity, category 4 (oral) | H302: Harmful if swallowed. |
| Serious eye damage/irritation, category 1 | H318: Causes serious eye damage. |
| Respiratory sensitization, category 1 | H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Skin sensitization, category 1 | H317: May cause an allergic skin reaction. |
| Germ cell mutagenicity, category 2 | H341: Suspected of causing genetic defects. |
| Carcinogenicity, category 1B | H350: May cause cancer. |
| Reproductive toxicity, category 1B | H360: May damage fertility or the unborn child. |
| Hazard to aquatic environment, category 1 | H400: Very toxic to aquatic life. |
| Hazard to aquatic environment, category 1 | H410: Very toxic to aquatic life with long lasting effects. |

2.2 Label elements**Labelling according to regulation 1272/2008/EC**

Signal word Danger

Hazard Pictograms



Hazard Statements May intensify fire; oxidizer. Harmful if swallowed. Causes serious eye damage. May cause cancer. Suspected of causing genetic defects. May damage fertility or the unborn child. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.

Precautionary Statements Obtain special instructions before use. Avoid release to the environment. Wear protective gloves / protective clothing / eye protection / face protection. IF exposed or concerned: Get medical advice/attention. IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. IF ON SKIN: Wash with plenty of soap and water.

Section 3. Composition

3.1 Substances

| Component | CAS No. | EEC No. | REACH No. | Conc w/w | CLP Classification (1272/2008/CE) |
|-------------------|------------|-----------|-----------------------|----------|--|
| Cobalt II Nitrate | 10026-22-9 | 233-402-1 | 01-2119542530-49-XXXX | <=100% | Ox. Sol. 2, Acute Tox. 4 (O), Eye Dam. 1, Resp. Sens. 1, Skin Sens. 1, Muta. 2, Carc. 1B, Repr. 1B, Aquatic Acute 1, Aquatic Chronic 1 |

Section 4. First Aid

4.1 Description of first aid measures

| | |
|--------------------------------------|---|
| Eyes | Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION. |
| Skin | Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. |
| Inhalation | Remove from exposure. |
| Ingestion | If conscious give plenty of water to drink. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. OBTAIN MEDICAL ATTENTION URGENTLY. |
| Personal protection for first aiders | Wear protective gloves / eye protection. |

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

| | |
|---------------------|--------------------|
| Extinguishing Media | Water spray. |
| Unsuitable Media | Nothing specified. |

5.2 Special hazards arising from the substance or mixture

| | |
|---------|---|
| Hazards | May evolve toxic fumes if involved in a fire. Mixtures with combustible materials are flammable. May cause or intensify fire; oxidizer. |
|---------|---|

5.3 Advice for firefighters

| | |
|-------------------------|--|
| Advice for firefighters | Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus. |
|-------------------------|--|

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection Presents no major hazards.

6.2 Environmental precautions

Environmental Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage Shovel/sweep up into container for removal Wash area down with copious amounts of water.
Minor Spillage Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Store in a suitable area for oxidising agents. Keep well separated from combustible materials.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

| Component | CAS No | Concentration | Workplace Exposure Limits | | | |
|-------------------|------------|---------------|---------------------------|---|--------------------------|---|
| | | | Long Term (8hr TWA) | | Short Term 15min period) | |
| Cobalt II Nitrate | 10026-22-9 | <=100% | - | - | 0.1 ppm | - |

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

Respiratory Protection If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.
Hand Protection Wear gloves.
Eye Protection Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.
Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance Red-brown powder.
Odour No specific odour.
pH 4 @20 °C (10% Solution)
Boiling Point Not available
Melting Point 55 °C
Flash Point Not applicable
Upper Flammable Limit Not applicable
Lower Flammable Limit Not applicable
Auto Ignition Not applicable
Explosive Properties No.
Oxidising Properties A strong oxidising agent.

| | |
|------------------|------------------------|
| Vapour Pressure | Not applicable |
| Relative Density | 1.8800 |
| Water Solubility | Very soluble in water. |

9.2 Other information

No data available.

Section 10. Stability & Reactivity

| | | |
|------|------------------------------------|---|
| 10.1 | Reactivity | No data available. |
| 10.2 | Chemical Stability | Stable under normal conditions |
| 10.3 | Possibility of hazardous reactions | No data available. |
| 10.4 | Conditions to Avoid | No specific conditions. |
| 10.5 | Incompatible Materials | Combustible materials. Many organic compounds. |
| 10.6 | Hazardous Decomposition Products | Not flammable but will assist a fire, producing irritant and toxic fumes of oxides of nitrogen. |

Section 11. Toxicological Information

11.1 Information on toxicological effects

| | |
|----------------------|--|
| Eyes | Causes serious eye damage. |
| Skin | The solid and solutions may be irritating to the skin. May cause skin sensitisation. |
| LD50 Skin | >2000 mg/Kg Rat |
| Ingestion | Harmful if swallowed. |
| LD50 Oral | 691 mg/Kg Rat |
| Inhalation | Presents no significant health hazard by inhalation. |
| LD50 Inhalation | Not available |
| TCLo | Not available |
| Carcinogenicity | May cause cancer by inhalation. |
| Mutagenicity | Suspected of causing genetic defects. |
| Reproductive Effects | May damage fertility or the unborn child. |

Section 12. Ecological

| | | |
|------|----------------------------------|---|
| 12.1 | Toxicity | Low levels are readily bio-degraded in the environment. Higher levels are toxic to marine and plant life. |
| | LC50 Algal | Not available |
| | LC50 Crustacea | 3.4mg/l Daphnia magna (48 hours) |
| | LC50 Fish | 66.8mg/l Goldfish (96 hours) |
| 12.2 | Persistence and degradability | No data available. |
| 12.3 | Bioaccumulative potential | No data available. |
| 12.4 | Mobility in soil | No data available. |
| 12.5 | Results of PBT & vPvB assessment | Assessment not required. |
| 12.6 | Other adverse effects | None known at present. |

Section 13. Disposal Considerations

13.1 Waste treatment methods

| | |
|------------------|--------------------------------------|
| Disposal Methods | Do not dispose of as domestic waste. |
|------------------|--------------------------------------|

Contaminated Packaging Wash out containers with water.

Section 14. Transport Information

| | |
|--|----------------------------------|
| 14.1 UN Number | 1477 |
| 14.2 Proper Shipping Name | Nitrates, inorganic, N.O.S. |
| 14.3 Transport classes | |
| UN classification | 5.1 |
| Subsidiary hazard(s) | None |
| Transport category | 2 |
| ADR Hazard ID | 50 |
| Tunnel Restriction Code | E |
| 14.4 Packing Group | II |
| 14.5 Environment hazards | Marine pollutant. |
| 14.6 Special precautions for user | No special precautions required. |
| 14.7 Transport in bulk | Not transported in bulk. |



Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Oxidising solid, category 2; Acute toxicity, category 4 (oral); Serious eye damage/irritation, category 1; Respiratory sensitization, category 1; Skin sensitization, category 1; Germ cell mutagenicity, category 2; Carcinogenicity, category 1B; Reproductive toxicity, category 1B; Hazard to aquatic environment, category 1; Hazard to aquatic environment, category 1

Signal word Danger

Hazard Pictograms



Hazard Statements H272, H302, H318, H350, H341, H360, H334, H317, H410
May intensify fire; oxidizer. Harmful if swallowed. Causes serious eye damage. May cause cancer. Suspected of causing genetic defects. May damage fertility or the unborn child. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.

Precautionary Statements P201, P273, P280, P308+P313, P304+P341, P302+P352
Obtain special instructions before use. Avoid release to the environment. Wear protective gloves / protective clothing / eye protection / face protection. IF exposed or concerned: Get medical advice/attention. IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. IF ON SKIN: Wash with plenty of soap and water.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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