

Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Cobalt Nitrate

Signal Word
DANGER

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

Chemtrec Emergency Phone Number: (800) 424-9646

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Oxidizing solids (Category 2). May intensify fire; oxidizer (H272). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270).

Hazard class: Sensitization, skin and respiratory (Category 1). May cause an allergic skin reaction or asthma symptoms or breathing difficulties if inhaled (H317+H334). Avoid breathing dust or fumes (P261).

Hazard class: Carcinogenicity (Category 1). May cause cancer (H350). Obtain special instructions before use (P201). Do not handle until all safety precautions have been read and understood (P202). Use personal protective equipment as required (P281).

Hazard class: Reproductive toxicity (Category 1). May damage fertility or the unborn child (H360).

Hazard class: Germ cell mutagenicity (Category 2). Suspected of causing genetic defects (H341).



SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Cobalt nitrate hexahydrate	10026-22-9	Co(NO ₃) ₂ •6H ₂ O	291.05	
Synonyms: Cobalt(II) nitrate; Cobaltous nitrate; Cobalt dinitrate				

SECTION 4 — FIRST AID MEASURES

If exposed or concerned: Get medical advice or attention (P308+P313).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

If on skin: Rinse cautiously with water for several minutes (P302+P351). Wash contaminated clothing before reuse (P363).

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell (P301+P330+P312).

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid.

Strong oxidizing material, severe fire hazard in contact with organic materials. When heated to

NFPA Code

None established

decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #3. Store with amides, nitrates, nitrites and azides.

Deliquescent. Store in a cool, dry place within a Flinn Chem-Saf™ bag.

Keep away from combustible materials (P220). Take any precautions to avoid mixing with combustibles (P221). Use only in a hood or well-ventilated area (P271).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264).

Contaminated clothing should not be allowed out of the workplace (P272). Use only in a hood or well-ventilated area (P271).

Exposure guidelines: (as cobalt) PEL 0.1 mg/m³ (OSHA); TLV 0.02 mg/m³ (ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Brown-orange powder. Odorless.

Melting point: 56 °C

Soluble: Water, alcohol, and most organic solvents.

Specific gravity: 1.88

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with reducers, organic materials, heat, and moisture.

Shelf life: Poor, deliquescent. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Harmful dust, irritant.

ORL-RAT LD₅₀: 691 mg/kg

Chronic effects: Cobalt and cobalt compounds are possible human carcinogens (IARC-2B).

IHL-RAT LC₅₀: N.A.

SKN-RBT LD₅₀: N.A.

Target organs: Lungs, thyroid.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #27f is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Nitrates, Inorganic, N.O.S. Hazard class: 5.1, Oxidizer. UN number: UN1477.

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (233-402-1), RCRA code D001.

SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use

and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

N.A. = Not available, not all health aspects of this substance have been fully investigated.

N/A = Not applicable

Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.

Revision Date: March 25, 2014
