

Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Cobalt

Signal Word
DANGER

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

Chemtrec Emergency Phone Number: (800) 424-9638

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Sensitization, respiratory (Category 1). May cause allergy or asthma symptoms or breathing difficulties if inhaled (H334). Avoid breathing dust or fumes (P261).



Hazard class: Carcinogenicity (Category 2). Suspected of causing cancer (H351). Obtain special instructions before use (P201). Do not handle until all safety precautions have been read and understood (P202).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Cobalt	7440-48-4	Co	58.93	

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 (P304+P340). **If experiencing respiratory symptoms:** Call a POISON CENTER or physician (P342+P311).

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: Wash with plenty of water.

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

Finely powdered dust is flammable when exposed to heat or flame. When heated to decomposition, may emit toxic fumes of cobalt.

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

NFPA Code

None established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and water. 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 #1. Store with metals and metal hydrides.

Use only in a hood or in a well-ventilated area.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection. Wash hands thoroughly after handling. Use only in a hood or in a well-ventilated area. In case of inadequate ventilation, wear respiratory protection (P285).

Exposure guidelines: (as metal dust and fume) PEL 0.1 mg/m³ (OSHA); TLV 0.02 mg/m³ (ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Gray, black, metallic solid. Odorless.

Boiling point: 2897 °C

Soluble: Nitric acid. Corrodes readily in air.

Melting point: 1494 °C

Specific gravity: 8.92

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with acids and oxidizing agents.

Contact of cobalt dust with strong oxidizers may cause fire and explosions.

Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Irritating dust, lung irritation, chest pain, and edema that may be fatal.

ORL-RAT LD₅₀: 6171 mg/kg

IHL-RAT LC₅₀: N.A.

Chronic effects: Possible carcinogen.

SKN-RBT LD₅₀: N.A.

Target organs: N.A.

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 #26a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-158-0), RCRA code D001.

SECTION 16 — OTHER INFORMATION

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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.

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