

Cobalt Chloride Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Cobalt Chloride

Signal Word
DANGER

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261
Chemtrec Emergency Phone Number: (800) 424-9640

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

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

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

Cobalt chloride, as a solid, is a known human carcinogen (IARC-1).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Cobalt chloride hexahydrate	7791-13-1	CoCl ₂ •6H ₂ O	237.95	
Synonyms: Cobalt(II) chloride; Cobaltous chloride; Cobalt dichloride				

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician (P311).

If inhaled: If breathing is difficult, remove victim to fresh air. Keep at rest in a position comfortable for breathing (P304+P341).

If on skin: Rinse cautiously with water for several minutes (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 solid.

When heated to decomposition, may emit toxic fumes.

NFPA Code

None established

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

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Gather up material in a pile (do not sweep). Place in a suitable 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 #2. Store with acetates, halides, sulfates, sulfites, thiosulfates and phosphates. Hygroscopic. Store in Flinn Chem-Saf™ bag. Store in a cool, dry place. 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 (P264). Contaminated clothing should not be allowed out of the workplace. In case of inadequate ventilation, wear respiratory protection (P285).

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

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Damp, red crystal. Odorless.

Melting point: 87 °C

Soluble: Water, alcohol, and acetone

Specific gravity: 1.92

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with moisture, oxidizers, and alkali metals.

Shelf life: Fair to poor, hygroscopic. Keep tightly closed. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Toxic, irritant, and possible sensitizer.

ORL-RAT LD₅₀: 766 mg/kg

Chronic effects: as a solid, known human carcinogen (IARC-1).

IHL-RAT LC₅₀: N.A.

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 #27f 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 (231-589-4).

SECTION 16 — OTHER INFORMATION

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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.

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