

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 255.60

Revision Date: March 25, 2014

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Cobalt Chloride Acidic Solution

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

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

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).

Hazard class: Skin corrosion or irritation (Category 1). Causes severe skin burns and eye damage (H314). Do not breathe the mist, vapors or spray (P260).

Hazard class: Specific target organ toxicity, single exposure; respiratory tract irritation (Category 3). May cause respiratory irritation (H335).

Industrial exposure to hydrochloric acid vapors and mists is listed as a known human carcinogen by IARC (IARC-1).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Cobalt chloride	7791-13-1	CoCl <sub>2</sub>	129.84	7%
Hydrochloric acid	7647-01-0	HCl	36.46	14%
Water	7732-18-5	H <sub>2</sub> O	18.00	79%

Synonym: Cobaltous chloride acidic solution

### SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell (P312).

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340). **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). Immediately call a POISON CENTER or physician (P310). **If on skin (or hair):** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). Wash contaminated clothing before reuse (P363). **If swallowed:** Rinse mouth. Do NOT induce vomiting (P301+P330+P331).

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solution.

**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 ventilate area. Contain the spill with sand or other inert absorbent material, neutralize with sodium bicarbonate or calcium hydroxide, and deposit in a sealed bag or container. See Sections 8 and 13 for further information.

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**SECTION 7 — HANDLING AND STORAGE**

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Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates and phosphates.

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**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

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Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271).

Exposure guidelines: (as cobalt) PEL 0.1 mg/m<sup>3</sup> (OSHA); TLV 0.02 mg/m<sup>3</sup> (ACGIH)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Red/purple liquid. Odorless.

pH: acidic

A solution of cobalt(ous) chloride, hydrochloric acid, and water.

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**SECTION 10 — STABILITY AND REACTIVITY**

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Shelf life: Good, if stored properly.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Toxic, corrosive.

ORL-RBT LD<sub>50</sub>: 900 mg/kg (as concentrated HCl)

Chronic effects: N.A.

IHL-RAT LC<sub>50</sub>: 3124 ppm/1 hour (as concentrated HCl)

Target organs: N.A.

SKN-RBT LD<sub>50</sub>: N.A.

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

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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

Flinn Suggested Disposal Method #24b then #27f is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Hydrochloric acid. Hazard class: 8, Corrosive. UN number: UN1789.

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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Not listed.

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**SECTION 16 — OTHER INFORMATION**

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

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