

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 253.00

Revision Date: February 2, 2012

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Cobalt

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

CHEMTREC Emergency Phone Number: (800) 424-9300

### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Cobalt

CAS#: 7440-48-4

### SECTION 3 — HAZARDS IDENTIFICATION

Gray, black, metallic solid. Odorless.

Cobalt is a possible human carcinogen as a fume or dust (IARC-2B).

Dust is mildly toxic by ingestion or inhalation. Inhalation of dust may cause pulmonary damage.

Finely powdered dust is flammable when exposed to heat or flame.

#### FLINN AT-A-GLANCE

Health-1

Flammability-0

Reactivity-1

Exposure-3

Storage-0

0 is low hazard, 3 is high hazard

### SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

Finely powdered dust is flammable when exposed to heat or flame.

**Fire Fighting Instructions:** Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

#### NFPA CODE

None

established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area. 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 and dispense in a hood.

### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and a chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).

Exposure guidelines: PEL 0.1 mg/m<sup>3</sup> (OSHA)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Gray, black, metallic solid. Odorless.

Solubility: Soluble in nitric acid. Corrodes readily in air.

Formula: Co

Formula weight: 58.93

Boiling point: 2897 °C

Melting point: 1494 °C

Specific gravity: 8.92

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**SECTION 10 — STABILITY AND REACTIVITY**

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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.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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

Chronic effects: Possible carcinogen.

Target organs: N.A.

ORL-RAT LD<sub>50</sub>: 6171 mg/kg

IHL-RAT LC<sub>50</sub>: 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 #26a is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Not regulated

Hazard class: N/A

UN number: N/A

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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

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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.**