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^3 (OSHA)

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SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

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

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.
Chronic effects: Possible carcinogen.
Target organs: N.A.

ORL-RAT LD_{50}: 6171 mg/kg
IHL-RAT LC_{50}: N.A.
SKN-RBT LD_{50}: N.A.

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

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
N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

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

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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