



SAFETY DATA SHEET

Section 1: Identification

Product Identifier: Cobalt Assay Kit (#BA0213)

Relevant Identified Uses of Substance or Mixture and Uses Advised Against:

Recommended Use: For Research Use Only

Uses Advised against: No information

Company:

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Section 2: Hazard(s) Identification

GHS Classification

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

GHS Label elements, including precautionary statements



Pictogram:

Signal word: Warning

Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces.

P273 Avoid release to the environment.

P280 Wear protective gloves/clothing and eye/face protection.

P302 + P352: If on skin: Wash with plenty of soap and water.

P304 + P340: If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a doctor/ physician if you feel unwell.

P332 + P313: If skin irritation occurs: Get medical advice/ attention.

P337 + P313: If eye irritation persists: Get medical advice/ attention.

Section 3: Composition/ Information on Ingredients

Component Name	CAS Number
Detection Reagent: 1 mL Liquid — Contains 0.1-2% Dithiothreitol	CAS #: 3483-12-3
Cobalt Standard: 0.8 mL Liquid — Contains 0.003% Cobalt(II) chloride	CAS #: 7646-79-9

Section 4: First-Aid Measures

Eye: Eye irritation. Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get immediate medical attention.

Skin: Itching or burning of the skin. Immediately flush the skin with plenty of water while removing contaminated clothing and shoes. Get immediate medical attention. Wash contaminated clothing before reuse.

Inhalation: Remove exposed person from source of exposure to fresh air. If not breathing, clear airway and start cardiopulmonary resuscitation (CPR). Avoid mouth-to-mouth resuscitation.

Ingestion: Get immediate medical attention. Do not induce vomiting unless directed by medical personnel.

Section 5: Fire-Fighting Measures

Extinguishing media: water spray, carbon dioxide, dry chemical powder or appropriate foam.

Special firefighting procedures: wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual fire and explosion hazards: emits toxic fumes under fire conditions.

Section 6: Accidental Release Measures

Keep unnecessary people away; isolate hazard area and deny entry.

Small spills: Take up with sand or other noncombustible absorbent material and place into containers for later disposal. Large spills: Dike far ahead of liquid spill for later disposal. Do not flush to sewer or waterways. Prevent release to the environment if possible.

Section 7: Handling and Storage

Keep receptacles tightly sealed and store according to the instructions in the assay protocol.

Section 8: Exposure Controls/Personal Protection

Follow standard laboratory safety procedures, including wearing chemical safety goggles, face shield, gloves, NIOSH approved respiratory protection and protective clothing. Wash and dry hands.

Section 9: Physical and Chemical Properties

Refer to Section 3. Composition/Information on Ingredients.

Section 10: Stability and Reactivity

Thermal Decomposition: no decomposition if used according to specifications.

Dangerous Products of Decomposition: nitrogen and sulfur oxides.

Dangerous Reactions: none.

Section 11: Toxicological Information

The toxicological effects of this product have not been thoroughly studied. We recommend handling all chemicals with caution.

Dithiothreitol - Acute toxicity: oral: No data available; LD50 Oral Rat female: 300 - 2,000 mg/kg; Inhalation: No data available; Dermal: No data available. Skin corrosion/irritation: human skin, Result: Skin irritation - 1 h. Serious eye damage/eye irritation: Causes serious eye damage. Respiratory or skin sensitization: Local lymph node assay (LLNA), Mouse, negative. Germ cell mutagenicity: Ames test, negative. Carcinogenicity IARC/NTP/ OSHA: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen. Reproductive toxicity: No data available; Specific target organ toxicity: No data available; Specific target organ toxicity: No data available; Aspiration hazard: No data available.

Cobalt (II) chloride – Acute toxicity: Oral – No data available. Acute toxicity estimate oral ->5,000 mg/kg; Dermal: No data available. Skin corrosion/irritation: No data available.; Serious eye damage/eye irritation: Mixture causes serious eye irritation. Respiratory or skin sensitization: Mixture may cause allergy or asthma symptoms or breathing difficulties if inhaled. Mixture may cause an allergic skin reaction. Germ cell mutagenicity: Evidence of genetic defects. Carcinogenicity: Possible carcinogen. IARC: 2A - Group 2A: Probably carcinogenic to humans (Cobalt(II) chloride); NTP: RAHC - Reasonably anticipated to be a human carcinogen (Cobalt(II) chloride) OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens. Reproductive toxicity: May harm the unborn child. May impair fertility. Specific target organ toxicity - single exposure: No data available; Specific target organ toxicity - repeated exposure: No data available; Aspiration hazard: No data available

Section 12: Ecological Information

Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.

Section 13: Disposal Considerations

Dispose in accordance with local, state or national regulations.

Section 14: Transport Information

DOT (US) - Not dangerous goods.

IMDG - Not dangerous goods.

IATA - Not dangerous goods.

Additional Transport Information: transport in accordance with local, state and national regulations.

Section 15: Regulatory Information

OSHA Hazards: Target Organ Effect.

SARA 311/312 Hazards: Chronic Health Hazard.

Section 16: Other Information

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This company shall not be held liable for any damage resulting from handling or from contact with the above product. This material must only be handled by suitably qualified experienced scientists in appropriately equipped and authorized facilities. The above information is believed to be correct but does not purport to be all inclusive and should be used as a guide only for experienced personnel. Always consult your safety advisor and follow appropriate local and national safety legislation. The absence of warning must not, under any circumstance, be taken to mean that no hazard exists.

Last reviewed: 07/2026

Disclaimer

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End Of MSDS