FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

MSDS #: 255.70 Revision Date: March 14, 2001

Section 1 — Chemical Product and Company Identification

Cobalt Chloride Alcohol Solution

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

Isopropyl Alcohol (67-63-0) 91%, Cobalt Chloride (7791-13-1) 2%, and Water (7732-18-5) 7%.

CAS#: None Established

Section 3 — Hazards Identification

Violet colored solution; distinctive odor; like rubbing alcohol. Irritant to body tissues. Slightly toxic by ingestion, inhalation, and skin absorption. The single lethal dose for a human adult is about 250 mL, although as little as 100 mL can be fatal. Class 1B flammable liquid.

FLINN AT-A-GLANCE

Health-1 Flammability-3 Reactivity-1 Exposure-1 Storage-3

0 is low hazard, 3 is high hazard

Section 4 — First Aid Measures

Call a physician, 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: Immediately flush with fresh water for 15 minutes. External: Wash continuously with fresh water for 15 minutes. Internal: Induce vomiting. Call a physician or poison control at once.

Section 5 — Fire Fighting Measures

Isopropyl Alcohol is a flammable liquid.NFPFlash Point: 60 FUpper: 12%Lower: 2.5%Autoignition Temperature: 860 FNoneWhen heated to decomposition, emits acrid smoke and fumes.Fire Fighting Instructions: Use triclass, dry chemical fire extinguisher. Firefighters should wear PPEand SCBA with full facepiece operated in positive pressure mode.Firefighters should wear PPE

Section 6 — Accidental Release Measures

Restrict unprotected personnel from area. Remove all ignition sources and ventilate area. Contain spill with sand and absorbent material; deposit in sealed bag or container. See Sections 8 and 13 for further information.

Section 7 — Handling and Storage

Flinn Suggested Chemical Storage Pattern: Organic #2. Store with alcohols, glycols, amines and amides. Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor can. Store in a cool dry place. Use and dispense in a hood. Avoid prolonged storage (see section 10).

Section 8 — Exposure Controls, Personal Protection

Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, chemical-resistant gloves and 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: TWA 400 ppm, STEL 500 ppm (OSHA, ACGIH)

NFPA Code None Established

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Section 9 — Physical and Chemical Properties

Violet colored solution; distinctive odor, like rubbing alcohol. A solution of cobalt(ous) chloride, isopropyl alcohol, and water.

Section 10 — Stability and Reactivity

Avoid contact with strong oxidizers, acetaldehyde, chlorine, ethylene oxide, acids, isocyanates. Shelf life: Poor, organic peroxide development is possible when exposed to light and air. Organic peroxides can result in explosions, especially when distilled. Avoid prolonged storage.

Section 11 — Toxicological Information

Acute effects: Severe eye irritant, nausea, headache, vomiting Chronic effects: N.A. Target organs: Nerves, kidneys ORL-RAT LD50: 5045 mg/kg as isopropyl alcohol IHL-RAT LC50: N.A. SKN-RBT LD50: 12800 mg/kg as isopropyl alcohol

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 consult with state and local regulations. Flinn Suggested Disposal Method #18a then #27f is one option.

Section 14 — Transport Information

Shipping Name: Flammable liquid NOS (isopropyl alcohol) Hazard Class: 3, Flammable liquid UN Number: UN1993

N/A = Not applicable

Section 15 — Regulatory Information

Not listed.

Section 16 — Other Information

Consult your copy of the Flinn Scientific Catalog/Reference Manual for additional information about laboratory chemicals. This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. Flinn Scientific Inc. assumes no legal responsibility for use or reliance upon this data.



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Flinn Chemical Packaging Prevents Accidents

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