FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

MSDS #: 91.00

Revision Date: November 25, 2002

Section 1 — Chemical Product and Company Identification

Barfoed's Reagent

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

Cupric Acetate (6046-93-1) 6%, Acetic Acid (64-19-7) 1%, Water (7732-18-5) 93%.

CAS#: None Established

Section 3 — Hazards Identification

Clear liquid with very slight blue color. Faint vinegar-like odor. Cupric Acetate is moderately toxic. Avoid contact with all body tissues.

FLINN AT-A-GLANCE Health-1 Flammability-0

Reactivity-0 Exposure-1 Storage-0

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: Give large quantities of water. Call a physician or poison control at once.

Section 5 — Fire Fighting Measures

Non-flammable, non-combustible liquid.

NFPA CODE

None Established

Section 6 — Accidental Release Measures

Restrict unprotected personnel from area and ventilate area. Contain spill with sand or 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: Inorganic #2. Store with acetates, halides, sulfates, sulfates, thiosulfates and phosphates.

<u>Section 8 — Exposure Controls , Personal Protection</u>

Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, chemical-resistant gloves and chemical-resistant apron.

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Section 9 — Physical and Chemical Properties

A reagent solution to detect glucose.

Ingredients: cupric acetate, 6.7g/100ml (CAS# 6046-93-1)

acetic acid, 1 ml/100ml (CAS# 64-19-7) distilled water, 100 ml (CAS# 7732-18-5)

Section 10 — Stability and Reactivity

Shelf life: Indefinite.

Section 11 — Toxicological Information

Acute effects: moderately toxic Chronic effects: N.A.

Target organs: N.A.

ORL-RAT LD50: N.A. IHL-RAT LC50: N.A. SKN-RBT LD50: 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 consult with state and local regulations. Flinn Suggested Disposal Method #24a 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

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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