MATERIAL SAFETY DATA SHEET MANUFACTURER: TAYLOR TECHNOLOGIES, INC **31 LOVETON CIRCLE** SPARKS, MD 21152 TELEPHONE: 410-472-4340 1.PRODUCT IDENTIFICATION CATALOG NO.: R-0861 PRODUCT NAME: Copper Reagent #2 CHEMICAL FAMILY: Alcoholic organic salt solution 2.INGREDIENTS INGREDIENT CAS NO. % NATURE OF HAZARD Isopropyl alcohol 67-63-0 <50 Flammable Nonhazardous ingredients NA None <1 Deionized water 7732-18-5 to 100 None 3. PHYSICAL/CHEMICAL CHARACTERISTICS APPEARANCE: Clear, colorless ODOR: Alcohol STATE: Liquid BOILING PT (F): 183 pH: 4.3 SPECIFIC GRAVITY: .92 VAPOR PRESSURE (mm Hg): 22 VAPOR DENSITY (AIR=1): 2.2 PERCENT VOLATILE BY VOLUME: 99 SOLUBILITY IN WATER: Soluble 4.FIRE, EXPLOSION HAZARD AND REACTIVITY DATA FLASH PT: 75 F METHOD: Closed cup FLAMMABLE LIMITS: LEL: 3.3% UEL: 18.9% EXTINGUISHING MEDIA: Dry chemical, carbon dioxide, water spray, or alcohol foam SPECIAL PROCEDURES: Wear self-contained (positive pressure if available) breathing apparatus and full-protective clothing. Cool exposed containers with water spray. Knock down vapors with water spray. FIRE/EXPLOSION HAZARDS AND HAZARDOUS DECOMPOSITION PRODUCTS: Vapors flammable. May be ignited by heat, sparks, or flames. May emit toxic fumes. NFPA CODE: Health: 1 Flammability: 3 Reactivity: 0 Specific: NA CONDITIONS TO AVOID: Extreme heat, temperatures. Protect from sparks, flames, oxidizers. 5.HEALTH HAZARD DATA INGREDIENT: Isopropyl alcohol TOXICITY: LD50(orl-rat): 5840 mg/kg PEL: 980 mg/m3 TLV: 980 mg/m3 STEL: NE ROUTE(S) OF ENTRY: Inhalation X Ingestion X Skin X TARGET ORGAN(S): Eyes, skin, respiratory tract CARCINOGENICITY: NTP NO IARC NO OSHA NO HEALTH HAZARDS AND SYMPTOMS OF EXPOSURE: EYES: Irritant. SKIN: Irritant. Contact may cause irritation. INGESTION: Irritant. May cause severe gastrointestinal disturbance. INHALATION: Irritant. May cause narcosis. MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Eye, skin, and respiratory conditions

R-0861

**6.PRECAUTIONARY MEASURES** PROTECTIVE EQUIPMENT: General purpose gloves, safety glasses, lab coat HANDLING: Avoid contact with eyes, skin, and clothing. Avoid breathing chemical. Wash thoroughly after handling. STORAGE: Cool, dry, well-ventilated area. Avoid direct sunlight. 7.EMERGENCY AND FIRST AID PROCEDURES EYE AND SKIN CONTACT: Immediately flush eyes with water for 20 minutes or until chemical is removed. Call physician. Wash skin thoroughly with soap and water. INGESTION: Give large amounts of water. Call physician. Induce vomiting under direction of physician. DO NOT induce vomiting or give anything by mouth to a person who is unconscious, rapidly losing consciousness, or convulsing. INHALATION: Remove to fresh air. Call physician. 8.SPILL AND DISPOSAL PROCEDURES SPILL OR RELEASE: Absorb with vermiculite or other inert material.

Containerize for later disposal. DISPOSAL: Incineration or other method to comply with all local, state, and federal regulations.

NA = Not applicable ND = Not determined NE = Not established

This Material Safety Data Sheet has been prepared in accordance with 29 CFR Part 1910.1200 and contains information believed to be accurate and complete at the date of preparation. However, no warranty is expressed or implied. Advice given under "Spill and Disposal Procedures" assumes compliance with federal, state, and local regulations regarding the disposal of hazardous waste.

DATE PREPARED: August 2005

Page 2