CHEMetrics, Inc. 4295 Catlett Rd., Calverton, VA 20138 (800) 356-3072 (540) 788-9026 Fax (540) 788-4856 E-mail technical@chemetrics.com After Hours Emergency Nos.:

(703) 447-9550 (540) 272-3874 02/25/03 (2844-6) 12/30/09

MATERIAL SAFETY DATA SHEET

I. CHEMICAL IDENTIFICATION

TRADE NAMES: OZONE 2 Vacu-vials® and OZONE 3 Trace Vacu-vials®

CATALOG NOS.: K-7413 and K-7463

DESCRIPTION: Reagent ampoules for the determination of ozone in water. Each Vacu-vial[™] contains approximately 2 mL of reagent sealed under vacuum. Each Trace Vacu-vial[™] contains approximately 5.5 mL of reagent sealed under vacuum.

NFPA RATINGS: HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 0

II. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT: Indigo Trisulfonate Potassium Salt CAS NO.: 67627-18-3 PERCENT: < 0.1

COMPONENT: Malonic Acid CAS NO.: 141-82-2 PERCENT: 0.1

COMPONENT: Deionized Water CAS NO.: 7732-18-5 PERCENT: 99.9

III. HAZARDS IDENTIFICATION

ACUTE TOXICITY: Irritation CHRONIC TOXICITY: No data available MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: No data available

IV. FIRST AID MEASURES

EYE AND SKIN CONTACT: Immediately flush eyes and skin with water for 15 minutes.

INGESTION: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Seek medical advice.

INHALATION: Remove individual to fresh air.

V. FIRE FIGHTING MEASURES

FLASH POINT: N/A AUTOIGNITION POINT: N/A FLAMMABILITY LIMITS: UPPER: N/A LOWER: N/A EXTINGUISHING MEDIA: Dry chemical, carbon dioxide, water spray or foam

VI. ACCIDENTAL RELEASE MEASURES

Take up with absorbent material. Place in small containers for disposal.

VII. HANDLING AND STORAGE

Always wear eye protection when working with these ampoules. WARNING: Do not break the tip of the ampoule unless it is completely immersed in your sample. Breaking the tip in the air may cause the glass ampoule to shatter.

If this product is used as directed, the user will not come in contact with or be exposed to any of its chemical components.

Wash thoroughly after handling. Avoid contact with eyes.

Fragile. Liquid in glass. Handle with care.

Exposure of this product to temperatures up to $120^{\circ}F(49^{\circ}C)$ or even below $32^{\circ}F(0^{\circ}C)$ will not create a safety hazard. For optimum analytical accuracy, the product should be stored in the dark and at room temperature and, if applicable, product components should not be used beyond expiration date.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA PEL & ACGIH TLV: None established

PROTECTIVE EQUIPMENT: Impact- and splash-resistant eyewear; Protective gloves compatible with the hazardous reagent constituents identified on this MSDS.

IX. PHYSICAL AND CHEMICAL PROPERTIES

STATE: Liquid APPEARANCE: Blue ODOR: None SOLUBILITY IN WATER: Complete pH: 2.6 BOILING POINT: 100°C MELTING POINT: 0°C VAPOR PRESSURE: N/A SPECIFIC GRAVITY: 1.0 VAPOR DENSITY: N/A

X. STABILITY AND REACTIVITY

INCOMPATIBILITIES: strong acids, strong bases HAZARDOUS DECOMPOSITION PRODUCTS: toxic fumes and gases, oxides of carbon, nitrogen and sulfur Stable under normal conditions.

XI. TOXICOLOGICAL INFORMATION

CARCINOGEN STATUS: None No other data available at this time.

XII. ECOLOGICAL INFORMATION

No data available at this time.

XIII. DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with Federal, State and Local Regulations.

XIV. TRANSPORT INFORMATION

Not regulated.

XV. REGULATORY INFORMATION

EUROPEAN INFORMATION: EU Symbols: None Risk Phrases: None Safety Phrases: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

CANADIAN INFORMATION: WHMIS Classification: Uncontrolled All chemical components of this product are listed on Canada's DSL.

U.S. INFORMATION: All chemical components of this product are listed on the TSCA Inventory.

XVI. OTHER INFORMATION

THE ABOVE INFORMATION IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. ALL PRODUCTS ARE OFFERED IN ACCORDANCE WITH THE MANUFACTURER'S CURRENT PRODUCTION SPECIFICATIONS AND ARE INTENDED SOLELY FOR USE IN ANALYTICAL TESTING. THE MANUFACTURER SHALL IN NO EVENT BE LIABLE FOR ANY INJURY, LOSS OR DAMAGE RESULTING FROM THE HANDLING, USE OR MISUSE OF THESE PRODUCTS.

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