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.:

Creation Date:

Revision Date:

MATERIAL SAFETY DATA SHEET

I. CHEMICAL IDENTIFICATION

TRADE NAMES: NITRITE CHEMets®, VACUettes®, and Vacu-vials®

CATALOG NOS.: R-7002, R-7002A, R-7002B, R-7002C, R-7002D, and K-7003

DESCRIPTION: Reagent ampoules for the determination of nitrite in water. Each CHEMet™ and VACUette™ ampoule contains approximately 0.5 mL of liquid reagent sealed under vacuum. Each Vacu-vial™ ampoule contains approximately 2 mL of liquid reagent sealed under vacuum.

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

II. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT: Cyclohexanediamine Tetraacetic Acid, Disodium Magnesium Salt

PERCENT: < 0.5 CAS NO .: 63451-33-2

COMPONENT: 2,5-Dihydroxybenzoic Acid CAS NO .: 490-79-9 PERCENT: < 2.0

COMPONENT: 4,5-Dihydroxynaphthalene-2,7-disulfonic acid CAS NO .: 5808-22-0 PERCENT: < 2.0

COMPONENT: Sulfanilic Acid Sodium Salt, Hydrate 123333-70-0 PERCENT: < 4.0 CAS NO .:

COMPONENT: Isopropyl Alcohol CAS NO .: PERCENT: 5.0 67-63-0

COMPONENT: Ethylene Glycol	

CAS NO .: 107-21-1 PERCENT: < 18.0 COMPONENT: Deionized Water PERCENT: > 67.5

COMPONENT: Other components CAS NO .: N/A PERCENT: < 1.0

7732-18-5

Any component of this mixture not specifically listed (e.g. "other components") is not considered to present a carcinogen hazard.

III. HAZARDS IDENTIFICATION

CAS NO .:

ACUTE TOXICITY: Irritation, cough, dizziness, headache, nausea, vomiting, abdominal pain, delayed lung edema CHRONIC TOXICITY: Irritation, skin sensitization, CNS effects MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Liver and kidney disorders

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 to fresh air. If necessary, give artificial respiration by mechanical means, do not use mouth to mouth resuscitation, seek medical advice.

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 or alcohol 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°F (49°C) or even below 32°F (0°C) will not create a safety hazard. For optimum analytical accuracy, the product should be stored in the dark and at room temperature, and should not be used beyond expiration date.

VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

OSHA PEL: 400 ppm TWA Isopropyl Alcohol ACGIH TLV: 100 mg/m3 C Ethylene Glycol, 200 ppm TWA Isopropyl Alcohol PROTECTIVE EQUIPMENT: Impact- and splash-resistant eyewear; Protective gloves compatible with the hazardous reagent constituents identified on this MSDS.

IX. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colorless to brown tint ODOR: None STATE: Liquid SOLUBILITY IN WATER: Miscible pH: 3.5 SPECIFIC GRAVITY: 1.02 MELTING POINT: -2°C BOILING POINT: 125°C VAPOR PRESSURE: N/A VAPOR DENSITY: N/A

X. STABILITY AND REACTIVITY

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

XI. TOXICOLOGICAL INFORMATION

CARCINOGENIC STATUS: Isopropyl alcohol: IARC - Group 3, not classifiable as to its carcinogenicity to humans; Ethylene glycol: ACGIH - Group A4, not classifiable as a human carcinogen.

No other data available at this time

XII. ECOLOGICAL INFORMATION

Ethylene glycol biodegrades rapidly, may leach to ground water, and is not expected to bioconcentrate. Isopropyl alcohol is not expected to adsorb to sediment or bioconcentrate, dangerous to aquatic life in high concentration. No other 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: Xi - IRRITANT

Risk Phrases: May cause sensitization by skin contact. Vapors may cause drowsiness and dizziness

Safety Phrases: Avoid contact with skin and eyes. In case of contact with skin or eyes, rinse immediately with plenty of water and seek medical advice. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

CANADIAN INFORMATION: WHMIS Classification: D2A, D2B

All chemical components of this product are listed on Canada's DSL or are exempt.

U.S. INFORMATION:

OSHA: This product meets the criteria for a hazardous substance as defined in the Hazard Communication Standard (29 CFR 1910.1200). SARA Section 313: This product contains isopropyl alcohol and ethylene glycol which

are subject to the reporting requirements of Section 313 of SARA Title III. 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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