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After Hours Emergency Nos.: (703) 447-9550

(540) 272-3874 **Creation Date:** 04/16/91 (2309-16)

05/20/10 **Revision Date:**

MATERIAL SAFETY DATA SHEET

I. CHEMICAL IDENTIFICATION

TRADE NAME: DETERGENTS CHEMets®

CATALOG NOS.: K-9400, R-9400, K-9404, and R-9404

DESCRIPTION: Reagent ampoule sets for the determination of anionic detergents in water. Each double tipped ampoule contains approximately 4 mL of liquid reagent. Each CHEMet™ ampoule contains approximately 0.25 mL of liquid reagent sealed under vacuum.

In the Double Tipped Ampoules:
NFPA RATINGS: HEALTH: 2 FLAMMABILITY: 0 REACTIVITY: 0

In the CHEMets®:

NFPA RATINGS: HEALTH: 1 FLAMMABILITY: 3 REACTIVITY: 0

II. COMPOSITION / INFORMATION ON INGREDIENTS

In the Double Tipped Ampoules: COMPONENT: Methylene Blue

OMPONENT:

CAS NO.: 61-73-4 PERCENT: < 0.1

COMPONENT: Sulfuric Acid

PERCENT: < 1.0 CAS NO .: 7664-93-9

COMPONENT: Sodium Phosphate, Monobasic, Dihydrate

PERCENT: < 2.0 CAS NO .: 13472-35-0

COMPONENT: Deionized Water

PERCENT: > 26.0 CAS NO.: 7732-18-5

COMPONENT: Chloroform

CAS NO.: 67-66-3 PERCENT: < 71.0

COMPONENT: Other components

PERCENT: < 0.1 CAS NO.: N/A

Any component of this mixture not specifically listed (e.g. "other components")

is not considered to present a carcinogen hazard.

In the CHEMets®:

Deionized Water COMPONENT:

CAS NO.: PERCENT: < 2.0 7732-18-5

COMPONENT: n-Propanol

PERCENT: > 98.0 CAS NO.: 71-23-8

III. HAZARDS IDENTIFICATION

Harmful if swallowed. May be absorbed through lungs and skin. ACUTE TOXICITY: Irritation, cough, abdominal pain, burns, dizziness, nausea, vomiting, eye damage, headache, drowsiness, CNS effects CHRONIC TOXICITY: Irritation, dermatitis, liver or kidney damage, defatting MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Skin, respiratory, liver and kidney disorders

IV. FIRST AID MEASURES

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

INGESTION: Do not induce vomiting. 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 attention.

INHALATION: Remove to fresh air. If necessary, give artificial respiration by mechanical means, do not use mouth to mouth resuscitation. Seek medical

V. FIRE FIGHTING MEASURES

FLASH POINT: 23 $^{\circ}$ C (closed cup) AUTOIGNITION POINT: 413 $^{\circ}$ C FLAMMABILITY LIMITS: UPPER: 13.5% LOWER: 2.1% EXTINGUISHING MEDIA: Dry chemical, carbon dioxide, water spray or foam FIRE/EXPLOSION HAZARDS-CHEMets®: Fire hazard when exposed to heat or flame. Moderate explosion hazard when exposed to heat or flame.

VI. ACCIDENTAL RELEASE MEASURES

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

VII. HANDLING AND STORAGE

Always wear eye protection when working with these ampoules.

WARNING: Do not break the tip of the CHEMet™ ampoule unless it is completely immersed in your sample. Breaking the tip in the air may cause the glass ampoule to shatter.

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 product components should not be used beyond expiration date.

VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

ACGIH TLV: 200 ppm TWA n-propanol, 10 ppm TWA chloroform, 1mg/m3 TWA sulfuric acid

OSHA PEL: 200 ppm TWA n-propanol, 50 ppm C chloroform, 1mg/m3 TWA

sulfuric acid PROTECTIVE EQUIPMENT: Impact- and splash-resistant eyewear; Protec-tive gloves compatible with the hazardous reagent constituents identified on this MSDS. Nitrile, neoprene, PVC, and natural latex rubber gloves are recommended.

IX. PHYSICAL AND CHEMICAL PROPERTIES

In the Double Tipped Ampoules:

APPEARANCE: Two phase: Blue/Colorless STATE: Liquid ODOR: Pleasant sweet ethereal pH (aqueous layer): 1.35 SPECIFIC GRAVITY: 1.0 (aqueous layer), 1.49 (organic layer) SOLUBILITY IN WATER: 0.82% VAPOR PRESSURE: 160 mm Hg BOILING POINT: 62°C MELTING POINT: -64°C VAPOR DENSITY: 4.12

In the CHEMets®:

STATE: Liquid APPEARANCE: Colorless ODOR: Ethanol-like SOLUBILITY IN WATER: Miscible SPECIFIC GRAVITY: 0.80 @ 20°C BOILING POINT: 97°C MELTING POINT: -127°C

VAPOR PRESSURE: N/A VAPOR DENSITY: N/A

X. STABILITY AND REACTIVITY

INCOMPATIBILITIES: strong bases, strong oxidizers, metals HAZARDOUS DECOMPOSITION PRODUCTS: chlorine gas, phosgene gas, oxides of carbon, nitrogen, phosphorus, sodium and sulfur Stable under normal conditions.

XI. TOXICOLOGICAL INFORMATION

CARCINOGENIC STATUS: Chloroform: IARC - Group 2B, possibly carcinogenic to humans; ACGIH - Group A3, confirmed animal carcinogen with unknown relevance to humans; California Proposition 65 - carcinogen; NTP - Reasonably anticipitated to be a human carcinogen. No other data available at this time.

XII. ECOLOGICAL INFORMATION

Chloroform is not expected to bioconcentrate. Sulfuric acid is harmful to aquatic organisms

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

U.S. DOT, IATA, and IMDG: Dangerous Goods in Excepted Quantities Hazard Class: 9 UN No.: 3316 Packing Group: II

XV. REGULATORY INFORMATION

EUROPEAN INFORMATION:

EU Symbols: Xn - HARMFUL, Xi - IRRITANT, F - HIGHLY FLAMMABLE Risk Phrases: Harmful if swallowed. Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. Risk of serious damage to eyes. Irritating to skin. Limited evidence of carcinogenic effect. Vapors may cause drowsiness and dizziness. Highly flammable. Safety Phrases: Avoid contact with eyes and skin. Wear suitable protective clothing, gloves, and eye/face protection. In case of contact with eyes or skin, rinse immediately and seek medical advice. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Keep away from sources of ignition - No smoking.

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XV. REGULATORY INFORMATION (continued)

CANADIAN INFORMATION:

WHMIS Classification: D1B, D2A, D2B, B2

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

U.S. INFORMATION:

RCRA: Contains RCRA regulated substances. EPA Waste ID Nos.:

CHEMets®: D001; Double Tipped Ampoules: D002, D022, U044

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 chloroform which is subject to the reporting requirements of Section 313 of SARA Title III.

CALIFORNIA PROPOSITION 65: This product contains a chemical known to

the State of California as a carcinogen.

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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