

SAFETY DATA SHEET

I. CHEMICAL IDENTIFICATION

PRODUCT TRADE NAME:

Double-Tipped Ampoules for Detergents CHEMets® Kit and Refill (R-9402) Double-Tipped Ampoules for Detergents Instrumental Test (R-9423)

COMPONENTS OF PRODUCT PART NOS.

K-9400, R-9400, K-9404, R-9404, R-9423 Complete CHEMets® kits and CHEMets® refills contain additional chemical reagent(s). See separate SDS(s).

MANUFACTURER:

CHEMetrics, Inc., 4295 Catlett Road, Midland VA 22728 phone: 800-356-3072, 540-788-9026 fax: 540-788-4856 email: technical@chemetrics.com

EMERGENCY PHONE NUMBERS:

FOR CHEMICAL EMERGENCY USE ONLY (spill, leak, fire, exposure, accident). Use the corporate numbers above for all other calls. Chemtrec within USA and Canada: 800-424-9300

Chemtrec outside USA and Canada: +1-703-527-3887

PRODUCT DESCRIPTION: Part of a water analysis test kit. Each double-tipped ampoule in K-9400, R-9400, K-9404, and R-9404 contains approximately 4 mL of liquid reagent. Each double-tipped ampoule in R-9423 contains approximately 9.5 mL of liquid reagent.

II. HAZARDS IDENTIFICATION

Harmful if swallowed. Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. Irritating to skin. Limited evidence of carcinogenic effect. NFPA RATINGS: HEALTH: 2 FLAMMABILITY: 0 REACTIVITY: 0

ACUTE TOXICITY: Irritation, cough, pain, burns, dizziness, nausea, vomiting, eye damage, headache, drowsiness, CNS effects

CHRONIC TOXICITY: Irritation, dermatitis, liver or kidney damage MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Skin, respiratory, liver and kidney disorders

III. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT: CAS NO.:	Methylene Blue 61-73-4	PERCENT:	< 0.1
COMPONENT: CAS NO.:	Sulfuric Acid 7664-93-9	PERCENT:	< 1
COMPONENT: CAS NO.:	Sodium Phosphai 13472-35-0	te, Monobasio PERCENT:	
COMPONENT: CAS NO.:	Deionized Water 7732-18-5	PERCENT:	26
COMPONENT: CAS NO.:	Chloroform 67-66-3	PERCENT:	71
COMPONENT: CAS NO.:	Other component N/A	s PERCENT:	< 1

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

IV. FIRST AID MEASURES

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

INGESTION: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupsful of milk or water. Never give anything by mouth to an unconscious person. Seek medical attention.

INHALATION: Remove individual 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 or carbon dioxide

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 this product.

Fragile. Liquid in glass. Handle with care. Wash thoroughly after handling. Avoid contact with eyes. Exposure of this product to temperatures up to 49°C or below 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: 50 ppm C chloroform, 1 mg/m³ TWA sulfuric acid ACGIH TLV: 10 ppm TWA chloroform, 0.2 mg/m³ TWA sulfuric acid PROTECTIVE EQUIPMENT: Impact- and splash-resistant eyewear; Protective gloves compatible with the hazardous reagent constituents identified on this SDS. Nitrile, neoprene, PVC, and natural latex rubber gloves are <u>not</u> recommended.

IX. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Pleasant sweet ethereal STATE: Liquid APPEARANCE: Two phase: Blue / Colorless SOLUBILITY IN WATER: 0.82% @ 20°C (chloroform) pH: 1.35 (aqueous laver) SPECIFIC GRAVITY: 1.0 (aqueous layer), 1.49 (chloroform) BOILING POINT: 62°C (chloroform) MELTING POINT: -64°C (chloroform) VAPOR PRESSURE: 160 mm Hg @ 20°C (chloroform) VAPOR DENSITY: 4.12 (chloroform)

X. STABILITY AND REACTIVITY

INCOMPATIBILITIES: strong bases, strong oxidizers, metals HAZARDOUS DECOMPOSITION PRODUCTS: chlorine gas, phosgene gas, hydrogen chloride, oxides of carbon, phosphorous, 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

Risk Phrases: Harmful if swallowed. Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. Irritating to skin. Limited evidence of carcinogenic effect.

Safety Phrases: Avoid contact with skin and eyes. Wear suitable protective clothing, gloves, and eye/face protection. In case of contact with skin or eyes, rinse immediately with plenty of water and seek medical advice. If swallowed, seek medical advice immediately and show the container or label. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

CANADIAN INFORMATION:

WHMIS Classification: D1B, D2A, D2B All chemical components of this product are listed on Canada's DSL or are exempt.



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XV. REGULATORY INFORMATION (continued)

U.S. INFORMATION: RCRA: Contains RCRA regulated substances. EPA Waste ID Nos.: 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: 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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I. CHEMICAL IDENTIFICATION

PRODUCT TRADE NAME: CHEMets® Ampoules for Filming Amines CHEMets® Kit and Refill (R-1001) CHEMets® Ampoules for Detergents CHEMets® Kit and Refill (R-9401)

COMPONENTS OF PRODUCT PART NOS .:

R-1000, R-1000E, K-1001, K-1001E, K-9400, R-9400, K-9404, R-9404 Complete kits and refills contain additional chemical reagent(s). See separate SDS(s).

MANUFACTURER:

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EMERGENCY PHONE NUMBERS:

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Chemtrec outside USA and Canada: +1-703-527-3887

PRODUCT DESCRIPTION: Part of a water analysis test kit. Each CHEMet[™] ampoule contains approximately 0.25 mL of liquid reagent sealed under vacuum.

II. HAZARDS IDENTIFICATION

Highly flammable. Irritant. Risk of serious damage to eyes. Vapors may cause drowsiness and dizziness.

NFPA RATINGS: HEALTH: 1 FLAMMABILITY: 3 REACTIVITY: 0 ACUTE TOXICITY: Irritation, eye damage, central nervous system effects, nausea

CHRONIC TOXICITY: CNS depression, irritation, dermatitis, defatting MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Eye and liver disorders

III. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT: CAS NO.:	Deionized Water 7732-18-5	PERCENT:	2
COMPONENT: CAS NO.:	n-Propanol 71-23-8	PERCENT:	98

IV. FIRST AID MEASURES

 $\ensuremath{\mathsf{EYE}}$ AND SKIN CONTACT: Immediately flush eyes and skin with water for 15 minutes.

INGESTION: Do not induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconscious person. Seek medical advice. INHALATION: Remove individual to fresh air. If necessary, give artificial respiration. Seek medical advice.

V. FIRE FIGHTING MEASURES

FLASH POINT: 23°C (closed cup) AUTOIGNITION POINT: 413°C FLAMMABILITY LIMITS: UPPER: 13.5% LOWER: 2.1% FIRE / EXPLOSION HAZARDS: Fire hazard when exposed to heat or flame. Moderate explosion hazard when exposed to heat or flame EXTINGUISHING MEDIA: Dry chemical or carbon dioxide

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 this product.

WARNING: Do not break the tip of the ampoule unless it is completely immersed in sample. Breaking the tip in 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.

Fragile. Liquid in glass. Handle with care.

Wash thoroughly after handling. Avoid contact with eyes.

Exposure of this product to temperatures up to 49°C or below 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 & ACGIH TLV: 200 ppm TWA n-propanol PROTECTIVE EQUIPMENT: Impact- and splash-resistant eyewear; Protective gloves compatible with the hazardous reagent constituents identified on this SDS.

IX. PHYSICAL AND CHEMICAL PROPERTIES

STATE: LiquidAPPEARANCE: ColorlessODOR: Ethanol-likeSPECIFIC GRAVITY: 0.80 @ 20°CSOLUBILITY IN WATER: MisciblepH: 8.5 at 200 g/L @ 20°CBOILING POINT: 97°CMELTING POINT: -127°CVAPOR PRESSURE: N/AVAPOR DENSITY: N/A

X. STABILITY AND REACTIVITY

INCOMPATIBILITIES: strong oxidizing agents HAZARDOUS DECOMPOSITION PRODUCTS: oxides of carbon Stable under normal conditions.

XI. TOXICOLOGICAL INFORMATION

CARCINOGENIC 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

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: F - HIGHLY FLAMMABLE, Xi - IRRITANT

Risk $\dot{P}hrases:$ Highly flammable. Risk of serious damage to eyes. Vapors may cause drowsiness and dizziness.

Safety Phrases: Keep away from sources of ignition – No smoking. 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 label where possible).

CANADIAN INFORMATION: WHMIS Classification: B2, D2B

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

U.S. INFORMATION: RCRA: Contains RCRA regulated substances. EPA Waste ID No.: D001 OSHA: This product meets the criteria for a hazardous substance as defined in the Hazard Communication Standard (29 CFR 1910.1200). 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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