

# SAFETY DATA SHEET

## I. CHEMICAL IDENTIFICATION

PRODUCT TRADE NAMES:

Chromate Vacu-vials® Ampoules, CHEMets® Refill, VACUettes® Refills PRODUCT PART NOS .:

K-2803 (Ampoules), R-2810, R-2810A, R-2810B, R-2810C, R-2810D COMPONENTS OF KIT CATALOG NOS .:

K-2803, K-2810, K-2810A, K-2810B, K-2810C, K-2810D

Complete kits 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 CHEMet<sup>™</sup> and VACUette<sup>™</sup> ampoule contains approximately 0.5 mL of liquid reagent sealed under vacuum. Each Vacu-vial<sup>™</sup> ampoule contains approximately 2 mL of liquid reagent sealed under vacuum.

## **II. HAZARDS IDENTIFICATION**

Corrosive. Causes burns. Harmful if swallowed.

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

ACUTE TOXICITY: Irritation, nausea, diarrhea, CNS effects, cough CHRONIC TOXICITY: Irritation, dermatitis, liver and kidney lesions MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Eye, skin, liver and kidney disorders

## **III. COMPOSITION / INFORMATION ON INGREDIENTS**

COMPONENT: CAS NO.:	s-Diphenylcarbazide 140-22-7	PERCENT:	< 0.1
COMPONENT: CAS NO.:	Acetone 67-64-1	PERCENT:	< 3.5
COMPONENT: CAS NO.:	Acetic Acid, Glacial 64-19-7	PERCENT:	10
COMPONENT: CAS NO.:	Diethylene Glycol 111-46-6	PERCENT:	27
COMPONENT: CAS NO.:	Deionized Water 7732-18-5	PERCENT:	> 59

## **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 cupsful of milk or water. Never give anything by mouth to an unconscious person. Induce vomiting if directed by medical personnel. Seek medical advice immediately. INHALATION: Remove individual to fresh air.

## V. FIRE FIGHTING MEASURES

AUTOIGNITION POINT: Not available FLASH POINT: Not available FLAMMABILITY LIMITS: UPPER: Not available LOWER: Not available 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 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: 10 ppm Glacial Acetic Acid TWA, 1000 ppm Acetone TWA ACGIH TLV: 10 ppm Glacial Acetic Acid TWA, 500 ppm Acetone TWA PROTECTIVE EQUIPMENT: Impact- and splash-resistant eyewear; Protective gloves compatible with the hazardous reagent constituents identified on this SDS.

## **IX. PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE: Colorless to brown tint STATE: Liquid ODOR: Mild, vinegar-like SPECIFIC GRAVITY: 1.03 pH: 2.45 SOLUBILITY IN WATER: Miscible BOILING POINT: 150°C MELTING / FREEZING POINT: -5°C VAPOR PRESSURE: Not determined VAPOR DENSITY: Not determined

## X. STABILITY AND REACTIVITY

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

## **XI. TOXICOLOGICAL INFORMATION**

CARCINOGENIC STATUS: : Acetone: ACGIH - Group A4, not classifiable as a human carcinogen. No other data available at this time.

#### **XII. ECOLOGICAL INFORMATION**

Acetic acid has high BOD, which may cause oxygen depletion in aquatic systems, and is expected to biodegrade rapidly. Acetone is expected to volatilize and leach in soil, is expected to biodegrade rapidly, and is not expected to bioconcentrate. Diethylene glycol has a low bioconcentration potential and is practically non-toxic 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**

This product is not regulated for transport. The complete kit contains additional chemical reagent(s). See corresponding SDS(s) for other kit components for transport information.

## **XV. REGULATORY INFORMATION**

#### **EUROPEAN INFORMATION:**

EU Symbols: C - CORROSIVE, Xn - HARMFUL

Risk Phrases: Causes burns. Harmful if swallowed.

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 container or label. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

## CANADIAN INFORMATION:

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

#### **U.S. INFORMATION:**

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**

#### SDS Creation Date: 2013-01-18

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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# SAFETY DATA SHEET

## I. CHEMICAL IDENTIFICATION

#### PRODUCT TRADE NAMES:

Acidifier Solution for Chromate Vacu-vials®, CHEMets®, and VACUettes® Kits PRODUCT PART NO.: A-2800

COMPONENTS OF KIT CATALOG NOS.:

K-2803, K-2810, K-2810A, K-2810B, K-2810C, K-2810D

Complete kits 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 bottle of acidifier solution contains approximately 9 mL of liquid reagent.

## **II. HAZARDS IDENTIFICATION**

Corrosive. Causes severe burns.

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

ACUTE TOXICITY: Irritation, burns, eye injury

CHRONIC TOXICITY: Irritation, dermatitis, tooth erosion, cyanosis, bronchitis, conjunctivitis

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Eye, skin, and respiratory disorders

## III. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT: CAS NO.:	Sulfuric Acid 7664-93-9	PERCENT: 39
COMPONENT: CAS NO.:	Deionized Water 7732-18-5	PERCENT: 61

## **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. 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 immediately.

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: Not applicable AUTOIGNITION POINT: Not available FLAMMABILITY LIMITS: UPPER: Not available LOWER: Not available 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.

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.

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: 1 mg/m<sup>3</sup> TWA Sulfuric acid ACGIH TLV: 0.2 mg/m<sup>3</sup> TWA Sulfuric acid 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: NoneSPECIFIC GRAVITY: 1.2SOLUBILITY IN WATER: MisciblepH: < 0.5</td>BOILING POINT: 140°CMELTING / FREEZING POINT: 1°CVAPOR PRESSURE: Not determinedVAPOR DENSITY: Not determined

## X. STABILITY AND REACTIVITY

INCOMPATIBILITIES: Reducing materials, bases, metals HAZARDOUS DECOMPOSITION PRODUCTS: hydrogen gas, oxides of sulfur Stable under normal conditions.

## **XI. TOXICOLOGICAL INFORMATION**

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

## XII. ECOLOGICAL INFORMATION

Sulfuric acid is harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment. 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: 8 UN No.: 1760 Packing Group: II

## XV. REGULATORY INFORMATION

EUROPEAN INFORMATION: EU Symbols: C - CORROSIVE Risk Phrases: Causes severe burns. 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. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

## CANADIAN INFORMATION:

WHMIS Classification: D1A, E All chemical components of this product are listed on Canada's DSL.

#### U.S. INFORMATION:

RCRA: Contains RCRA regulated substances. EPA Waste ID No.: D002 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**

#### SDS Creation Date: 2013-01-18

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CHEMetrics, Inc. 4295 Catlett Rd., Midland, VA 22728 (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 2008-12-08 (2984-7) 2012-02-14

## MATERIAL SAFETY DATA SHEET

## I. CHEMICAL IDENTIFICATION

TRADE NAME: COLOR COMPARATOR

#### CATALOG NOS .:

C-1805, C-1805E, C-1810, C-2810, C-2810A, C-2810B, C-2810C, C-2810D, C-3810, C-3901, C-3902, C-4601, C-4601A, C-4601B, C-4601C, C-4601D, C-4605, C-4605A, C-4605B, C-4605C, C-4605D, C-4815, C-4815C, C-6502, C-6502D, C-7501, C-7501L, C-7511, C-7518, C-7540, C-7599, C-9011

DESCRIPTION: Color standard ampoules used to quantify test results for the determination of various analytes in water. Each CHEMet<sup>™</sup> and VACUette<sup>™</sup> comparator ampoule contains approximately 1.7 mL of liquid reagent. Each ULR CHEMet<sup>™</sup> comparator ampoule contains approximately 6.7 mL of liquid reagent.

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

## **II. HAZARDS IDENTIFICATION**

Harmful if swallowed. ACUTE TOXICITY: Irritation, nausea, diarrhea, nerve depression CHRONIC TOXICITY: Irritation, liver or kidney lesions MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Eye, skin, liver or kidney disorders

## III. COMPOSITION / INFORMATION ON INGREDIENTS

 COMPONENT:
 Diethylene Glycol

 CAS NO.:
 111-46-6
 PERCENT:
 < 25.0</td>

COMPONENT: Deionized Water CAS NO.: 7732-18-5 PERCENT: > 74

COMPONENT:Other componentsCAS NO.:N/APERCENT:< 1.0</td>

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: 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.

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°C) or even below  $32^{\circ}F$  (0°C) will not create a safety hazard. For optimum analytical accuracy, these products 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: 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: Various colors
 ODOR: None

 SOLUBILITY IN WATER: Miscible
 pH RANGE: 2.5 - 11.5

 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: acids, bases HAZARDOUS DECOMPOSITION PRODUCTS: oxides of carbon Stable under normal conditions.

## **XI. TOXICOLOGICAL INFORMATION**

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

#### **XII. ECOLOGICAL INFORMATION**

Diethylene glycol has a low bioconcentration potential and is practically nontoxic 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**

Not regulated.

## **XV. REGULATORY INFORMATION**

EUROPEAN INFORMATION: EU Symbols: Xn - HARMFUL Risk Phrases: Harmful if swallowed. Safety Phrases: If swallowed, seek medical advice immediately and show container or label.

CANADIAN INFORMATION: WHMIS Classification: D2A 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**

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