

# SAFETY DATA SHEET

# I. CHEMICAL IDENTIFICATION

PRODUCT TRADE NAMES: Sulfate Vacu-vials® Ampoules

PRODUCT PART NO.: K-9203 (Ampoules)

COMPONENTS OF KIT CATALOG NO .: K-9203

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 Vacu-vial™ ampoule contains approximately 0.6 mL of liquid reagent sealed under vacuum.

#### **II. HAZARDS IDENTIFICATION**

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

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

# III. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT: CAS NO.:	Deionized Water 7732-18-5	PERCENT:	> 99
COMPONENT: CAS NO.:	Other components N/A	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**

 $\ensuremath{\mathsf{EYE}}$  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. INHALATION: Remove individual to fresh air.

#### V. FIRE FIGHTING MEASURES

FLASH POINT: >75°C (closed cup) AUTOIGNITION 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 & ACGIH TLV: None 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: Liquid
 APPEARANCE: Colorless

 ODOR: None
 SPECIFIC GRAVITY: 1.0

 SOLUBILITY IN WATER: Miscible
 pH: 7

 BOILING POINT: 100°C
 MELTING / FREEZING POINT: 0°C

 VAPOR PRESSURE: Not determined
 VAPOR DENSITY: Not determined

# X. STABILITY AND REACTIVITY

INCOMPATIBILITIES: none known 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**

This item is not regulated for transport.

Note: This item may be shipped as part of a test kit or reagent set composed of various chemical reagents. If so, the following classification may be applicable.: Hazard Class 9, UN 3316 Chemical Kit, PG II or III

# XV. REGULATORY INFORMATION

EUROPEAN INFORMATION: EU Symbols: None Risk Phrases: None 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.

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

#### SDS Creation Date: 2013-03-15

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 Iron in Brine CHEMets® Kit Acidifier Solution for Nitrate CHEMets® and Vacu-vials® Kits Acidifier Solution for Sulfate Vacu-vials® Kit

PRODUCT PART NOS.: A-6001, A-6901, A-9200

COMPONENTS OF KIT CATALOG NOS.: K-6002, K-6905, K-6913, K-9203 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 18 mL of liquid reagent.

# **II. HAZARDS IDENTIFICATION**

Corrosive. Causes burns. Irritating to respiratory system.

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

ACUTE TOXICITY: Irritation, burns, labored breathing, pain, vomiting, permanent eye injury, cough, delayed lung edema

CHRONIC TOXICITY: Irritation, tooth erosion, bronchitis, dermatitis MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Eye, skin, and respiratory disorders

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

COMPONENT:Hydrochloric Acid, ConcentratedCAS NO.:7647-01-0PERCENT: 54 - 69COMPONENT:Deionized WaterCAS NO.:7732-18-5PERCENT: 31 - 46

# **IV. FIRST AID MEASURES**

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

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: Not available AUTOIGNITION 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.

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: 5 ppm C hydrochloric acid ACGIH TLV: 2 ppm C hydrochloric 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: Liquid
 APPEARANCE: Colorless

 ODOR: Pungent
 SPECIFIC GRAVITY: 1.1

 SOLUBILITY IN WATER: Complete
 pH: 0.1

 BOILING POINT: 108.58°C (constant boiling azeotrope at 20.22% HCI)

 MELTING / FREEZING POINT RANGE: -62 to -46°C

 VAPOR PRESSURE: Not determined
 VAPOR DENSITY: Not determined

# X. STABILITY AND REACTIVITY

INCOMPATIBILITIES: bases, strong oxidizers, metals, reducing agents HAZARDOUS DECOMPOSITION PRODUCTS: hydrogen chloride, chlorine and hydrogen gas Stable under normal conditions.

# **XI. TOXICOLOGICAL INFORMATION**

CARCINOGENIC STATUS: Hydrochloric acid: IARC - Group 3, not classifiable as to its carcinogenicity to humans No other data available at this time.

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

Hydrochloric acid hydrolyzes when exposed to water, will neutralize soil carbonatebased components, and evaporates from soil. 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

Note: This item may be shipped as part of a test kit or reagent set composed of various chemical reagents. If so, the following classification may be applicable.: Hazard Class 9, UN 3316 Chemical Kit, PG II or III

# **XV. REGULATORY INFORMATION**

#### EUROPEAN INFORMATION:

EU Symbols: C - CORROSIVE

Risk Phrases: Causes burns. Irritating to respiratory system.

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: 2013-03-15

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# SAFETY DATA SHEET

# I. CHEMICAL IDENTIFICATION

PRODUCT TRADE NAMES:

Activator Powder for Sulfate Vacu-vials® Test Kit

PRODUCT PART NO.: A-9202

COMPONENT OF KIT CATALOG NO .: K-9203

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 activator powder contains approximately 14.5 g of powder.

# **II. HAZARDS IDENTIFICATION**

Danger. Toxic if swallowed. Harmful by inhalation.

NFPA RATINGS: HEALTH: 3 FLAMMABILITY: 0 REACTIVITY: 0 ACUTE TOXICITY: Irritation, nausea, vomiting, diarrhea, respiratory and cardiovascular disturbances, central nervous system effects CHRONIC TOXICITY: Irritation, liver and kidney effects MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Heart, blood, liver, kidney and CNS disorders

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

COMPONENT: CAS NO.:

NT: Barium Chloride, Dihydrate 10326-27-9 PERCENT: 100

# **IV. FIRST AID MEASURES**

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

INGESTION: Do not induce vomiting. 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 attention immediately.

#### **V. FIRE FIGHTING MEASURES**

FLASH POINT: Not applicable AUTOIGNITION 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.

Wash thoroughly after handling. Avoid contact with eyes and skin. Do not breathe dust.

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

# VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

OSHA PEL & ACGIH TLV: 0.5 mg/m<sup>3</sup> TWA barium

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: Fine crystals
 APPEARANCE: White

 ODOR: None
 DENSITY: 3.86 g/cm<sup>3</sup>

 SOLUBILITY IN WATER: Very soluble
 pH: 5 - 8 (5% solution)

 BOILING POINT: 1560°C
 MELTING / FREEZING POINT: 962°C

 VAPOR PRESSURE: Not available
 VAPOR DENSITY: Not available

# X. STABILITY AND REACTIVITY

INCOMPATIBILITIES: strong oxidizing agents HAZARDOUS DECOMPOSITION PRODUCTS: hydrogen chloride gas, chlorine gas Stable under normal conditions.

### **XI. TOXICOLOGICAL INFORMATION**

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

# **XII. ECOLOGICAL INFORMATION**

Barium chloride can accumulate in plants when it exceeds the calcium and magnesium levels in soil. 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: 6.1 UN No.: 1564 Packing Group: III

Note: This item may be shipped as part of a test kit or reagent set composed of various chemical reagents. If so, the following classification may be applicable.: Hazard Class 9. UN 3316 Chemical Kit, PG II or III

# **XV. REGULATORY INFORMATION**

#### EUROPEAN INFORMATION:

## EU Symbols: T – TOXIC

Risk Phrases: Toxic if swallowed. Harmful by inhalation.

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. When using, do not eat or drink. 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: D1B

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 No.: D005 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 barium chloride which is 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**

#### SDS Creation Date: 2013-03-15

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