



# SAFETY DATA SHEET

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K3925-1

Creation Date: 2012-07-16

## I. CHEMICAL IDENTIFICATION

### PRODUCT TRADE NAMES:

DEHA Titrets® Ampoules  
Hydrogen Peroxide Go-No-Go Vials  
Hydrogen Peroxide Titrets® Ampoules  
Nitrite Titrets® Ampoules

### PRODUCT PART NOS.:

K-3925 (Ampoules), K-5500C (Vials), K-5530 (Ampoules),  
K-7025 (Ampoules), K-7050 (Ampoules)

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.

Chemtec within USA and Canada: 800-424-9300

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

PRODUCT DESCRIPTION: Part of a water analysis test kit. Each Titret™ ampoule contains approximately 1.1 mL of liquid reagent sealed under vacuum. Each screw-cap vial contains approximately 4.1 mL of liquid reagent.

## II. HAZARDS IDENTIFICATION

Corrosive. Causes severe burns.

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

ACUTE TOXICITY: Irritation, burns, nausea, vomiting

CHRONIC TOXICITY: Irritation to eyes and skin, possible eye damage, tooth erosion

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Eye and skin disorders.

## III. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT:	Ceric Sulfate	
CAS NO.:	13590-82-4	PERCENT: ≤ 5

COMPONENT:	Sulfuric Acid	
CAS NO.:	7664-93-9	PERCENT: 6 - 11

COMPONENT:	Deionized Water	
CAS NO.:	7732-18-5	PERCENT: > 84

## 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. Seek medical advice immediately.

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 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.**

**WARNING:** Breaking a Titret™ ampoule tip when a valve assembly is not attached 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 even 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: Liquid APPEARANCE: Yellow

ODOR: None SPECIFIC GRAVITY: 1.04

SOLUBILITY IN WATER: Miscible pH: < 0.5

BOILING POINT: 109°C MELTING POINT: 0°C

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

## X. STABILITY AND REACTIVITY

INCOMPATIBILITIES: strong bases, strong reducing agents

HAZARDOUS DECOMPOSITION PRODUCTS: hydrogen gas, oxides of sulfur

Stable under normal conditions.

## XI. TOXICOLOGICAL INFORMATION

Carcinogen 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: 9 UN No.: 3316 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: D1B, D2B, E

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.: 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

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

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S3905-1

Creation Date: 2012-07-16

## I. CHEMICAL IDENTIFICATION

PRODUCT TRADE NAME: Activator Solution for DEHA Titrets® Kit

PRODUCT PART NO.: A-3905

COMPONENT OF KIT CATALOG NO.: K-3925

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 solution contains approximately 9 mL of liquid reagent.

## II. HAZARDS IDENTIFICATION

Corrosive. Causes severe burns. Harmful if swallowed. Toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.  
NFPA RATINGS: HEALTH: 3 FLAMMABILITY: 0 REACTIVITY: 0  
ACUTE TOXICITY: irritation, burns, coughing, vomiting  
CHRONIC TOXICITY: irritation, tooth erosion  
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: eye, skin, and respiratory disorders, impaired liver or kidney function

## III. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT: Ferric Nitrate, Nonahydrate  
CAS NO.: 7782-61-8 PERCENT: 3

COMPONENT: 1,10-Phenanthroline, Monohydrate  
CAS NO.: 5144-89-8 PERCENT: 5

COMPONENT: Nitric Acid  
CAS NO.: 7697-37-2 PERCENT: 16

COMPONENT: Deionized Water  
CAS NO.: 7732-18-5 PERCENT: 76

## 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 cupfuls of milk or water. Seek medical advice immediately.

INHALATION: Remove individual to fresh air. If necessary, give oxygen or artificial respiration and 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, water spray, 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& ACGIH TLV: 2 ppm TWA nitric 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: Gold to Orange ODOR: None  
SOLUBILITY IN WATER: Miscible pH: < 2 SPECIFIC GRAVITY: 1.08  
BOILING POINT: ≥100° C MELTING POINT: -12° C  
VAPOR PRESSURE / VAPOR DENSITY: Not determined

## X. STABILITY AND REACTIVITY

INCOMPATIBILITIES: metals, strong bases, oxidizing agents  
HAZARDOUS DECOMPOSITION PRODUCTS: oxides of carbon and nitrogen  
Stable under normal conditions.

## XI. TOXICOLOGICAL INFORMATION

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

## XII. ECOLOGICAL INFORMATION

1,10-Phenanthroline 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: 9 UN No.: 3316 Packing Group: II

## XV. REGULATORY INFORMATION

EUROPEAN INFORMATION:

EU Symbols: C - CORROSIVE, Xn - HARMFUL, N - DANGEROUS FOR THE ENVIRONMENT

Risk Phrases: Causes severe burns. Harmful if swallowed. Toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.  
Safety Phrases: Avoid contact with skin or 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 label where possible).

CANADIAN INFORMATION:

WHMIS Classification: D1B, E

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.: D002  
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 nitric acid 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

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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