



# 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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S5500C-1  
Creation Date: 2012-07-16

## I. CHEMICAL IDENTIFICATION

### PRODUCT TRADE NAMES:

Indicator Solution for Hydrogen Peroxide Go-No-Go Kit (S-5500C)  
Valve Assemblies for Hydrogen Peroxide Titrets® Kit (S-7000T)  
Valve Assemblies for Nitrite Titrets® Kits (S-7000T)

COMPONENTS OF KIT CATALOG NOS.: K-5500C, K-5530, K-7025, K-7050  
*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 indicator solution contains approximately 9 mL of liquid reagent. Each valve assembly contains approximately 0.05 mL of liquid reagent.

## II. HAZARDS IDENTIFICATION

Harmful if swallowed. Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

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

ACUTE TOXICITY: irritation

CHRONIC TOXICITY: liver and kidney damage, CNS depression, respiratory tract irritation

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Liver, kidney, and respiratory disorders

## III. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT: Ferrous Sulfate, Heptahydrate  
CAS NO.: 7782-63-0 PERCENT: 0.5

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

COMPONENT: Deionized Water  
CAS NO.: 7732-18-5 PERCENT: 1

COMPONENT: Diethylene Glycol  
CAS NO.: 111-46-6 PERCENT: 97

## 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 cupfuls of milk or water. Seek medical attention.

INHALATION: Remove individual to fresh air.

## V. FIRE FIGHTING MEASURES

FLASH POINT: 124°C (closed cup) AUTOIGNITION POINT: 224°C  
FLAMMABILITY LIMITS: UPPER: 10.8% LOWER: 1.6%  
EXTINGUISHING MEDIA: Dry chemical, water spray, carbon dioxide, 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.

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 and 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: Red ODOR: None  
SOLUBILITY IN WATER: Miscible pH: 7.5  
BOILING POINT: 245°C MELTING POINT: -10°C  
VAPOR PRESSURE: Low SPECIFIC GRAVITY: 1.12  
VAPOR DENSITY: 3.66

## X. STABILITY AND REACTIVITY

INCOMPATIBILITIES: strong bases, strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS: oxides of carbon, nitrogen and sulfur

Stable under normal conditions.

## XI. TOXICOLOGICAL INFORMATION

Carcinogen 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. Diethylene glycol has a low potential to bioconcentrate 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 transport information.

## XV. REGULATORY INFORMATION

EUROPEAN INFORMATION:

EU Symbols: Xn - HARMFUL

Risk Phrases: Harmful if swallowed. Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

Safety Phrases: 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, D2A

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

U.S. INFORMATION:

All chemical components of this product are listed on the TSCA Inventory.

## XVI. OTHER INFORMATION

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