



# SAFETY DATA SHEET

Page 1 of 1  
K7630-1

## I. CHEMICAL IDENTIFICATION

PRODUCT TRADE NAME: Permanganate Titrets® Ampoules  
PRODUCT PART NO.: K-7630 (Ampoules)  
COMPONENT OF KIT CATALOG NO.: K-7630  
*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 Titret™ ampoule contains approximately 1.1 mL of liquid reagent sealed under vacuum.

## II. HAZARDS IDENTIFICATION

Corrosive. Causes burns.

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

ACUTE TOXICITY: Irritation, burns, eye damage, abdominal pain, nausea, vomiting, diarrhea

CHRONIC TOXICITY: Irritation, tooth erosion, bronchitis, kidney effects, gastrointestinal disturbances, liver damage

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

## III. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT:	Sulfuric Acid	
CAS NO.:	7664-93-9	PERCENT: 8
COMPONENT:	Ferrous Ammonium Sulfate, Hexahydrate	
CAS NO.:	7783-85-9	PERCENT: 19
COMPONENT:	Deionized Water	
CAS NO.:	7732-18-5	PERCENT: 73

## IV. FIRST AID MEASURES

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

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 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 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 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, 1 mg/m<sup>3</sup> TWA as iron  
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: Pale green  
ODOR: None SPECIFIC GRAVITY: 1.1  
SOLUBILITY IN WATER: Miscible pH: < 1.0  
BOILING POINT: 108°C MELTING / FREEZING POINT: 4°C  
VAPOR PRESSURE: Not determined VAPOR DENSITY: Not determined

## X. STABILITY AND REACTIVITY

INCOMPATIBILITIES: strong bases, strong reducing agents, metals  
HAZARDOUS DECOMPOSITION PRODUCTS: hydrogen gas, ammonia 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: 9 UN No.: 3316 Packing Group: II

## XV. REGULATORY INFORMATION

EUROPEAN INFORMATION:

EU Symbols: C - CORROSIVE

Risk Phrases: Causes 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, 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 an ammonium salt 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: 2012-11-13**

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.

*Titrets® is a registered trademark of CHEMetrics, Inc.*



# SAFETY DATA SHEET

Page 1 of 1  
S9610T-1

## I. CHEMICAL IDENTIFICATION

### PRODUCT TRADE NAME:

Valve Assemblies for Permanganate Titrets® Kit  
Valve Assemblies for Sulfite Titrets® Kits  
Valve Assemblies for Sulfite in Wine Titrets® Kit  
Valve Assemblies for Thiosulfate Titrets® Kit

### COMPONENT OF KIT CATALOG NOS:

K-7630, K-9602, K-9605, K-9610, K-9610W, K-9650, K-9705

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 valve assembly contains approximately 0.05 mL of liquid reagent.

## II. HAZARDS IDENTIFICATION

Corrosive. Causes burns.

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

ACUTE TOXICITY: Irritation or burns to eyes and skin

CHRONIC TOXICITY: Irritation

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Eye and skin disorders

## III. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT:	Phosphoric Acid	
CAS NO.:	7664-38-2	PERCENT: $\geq 85$

COMPONENT:	Deionized Water	
CAS NO.:	7732-18-5	PERCENT: $\leq 15$

## IV. FIRST AID MEASURES

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

INGESTION: Do not induce vomiting. If victim is conscious and alert, give large quantities of water. Never give anything by mouth to an unconscious person.

Seek medical advice immediately.

INHALATION: Remove individual to fresh air.

## 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

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: 1 mg/m<sup>3</sup> TWA phosphoric 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: Viscous Liquid	APPEARANCE: Colorless
ODOR: None	SPECIFIC GRAVITY: 1.68
SOLUBILITY IN WATER: Complete	pH: 1
BOILING POINT: 158°C	MELTING / FREEZING POINT: 21°C
VAPOR PRESSURE: 2 hPa @ 20°C	VAPOR DENSITY: Not available

## X. STABILITY AND REACTIVITY

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

## XI. TOXICOLOGICAL INFORMATION

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

## XII. ECOLOGICAL INFORMATION

Phosphoric acid may leach to groundwater; acidity is reduced by water hardness, but phosphate may persist indefinitely.  
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 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: 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: 2012-11-13

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.

Titrets® is a registered trademark of CHEMetrics, Inc.