



SAFETY DATA SHEET

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K2020-1
Creation Date: 2012-10-03

I. CHEMICAL IDENTIFICATION

PRODUCT TRADE NAME: Chloride Titrets® Ampoules

PRODUCT PART NOS.:

K-2020 (Ampoules), K-2050 (Ampoules), K-2051 (Ampoules),
K-2055 (Ampoules), K-2070 (Ampoules)

COMPONENT OF KIT CATALOG NOS.:

K-2020, K-2050, K-2051, K-2055, K-2070

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

Toxic by inhalation, in contact with skin and if swallowed. Danger of cumulative effects. Toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

NFPA RATINGS: HEALTH: 2 FLAMMABILITY: 0 REACTIVITY: 0

ACUTE TOXICITY: Irritation, cough, labored breathing, metallic taste, abdominal pain, nausea, diarrhea, delayed pulmonary edema

CHRONIC TOXICITY: Irritation, skin sensitization, liver and kidney lesions.

Mercury compounds affect the kidneys and nervous system.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Skin and respiratory disorders, impaired kidney and liver function

III. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT:	Nitric Acid	
CAS NO.:	7697-37-2	PERCENT: < 1
COMPONENT:	Mercuric Nitrate, Monohydrate	
CAS NO.:	7783-34-8	PERCENT: < 3
COMPONENT:	Deionized Water	
CAS NO.:	7732-18-5	PERCENT: > 96

IV. FIRST AID MEASURES

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

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 instructed by medical personnel. Seek medical attention.

INHALATION: Remove individual to fresh air. Seek medical advice.

V. FIRE FIGHTING MEASURES

FLASH POINT: Not applicable AUTOIGNITION POINT: No data available
FLAMMABILITY LIMITS: UPPER: No data available LOWER: No data 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: 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: 0.1 mg/m³ C as mercury, 2 ppm TWA nitric acid
ACGIH TLV: 0.025 mg/m³ TWA (skin) as mercury, 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: Colorless ODOR: None
SOLUBILITY IN WATER: Miscible pH: < 1 SPECIFIC GRAVITY: 1.03
BOILING POINT: 110°C MELTING / FREEZING POINT: 0°C
VAPOR PRESSURE: N/A VAPOR DENSITY: N/A

X. STABILITY AND REACTIVITY

INCOMPATIBILITIES: strong bases, strong reducing agents, alcohols, metals
HAZARDOUS DECOMPOSITION PRODUCTS: oxides of mercury and nitrogen
Stable under normal conditions.

XI. TOXICOLOGICAL INFORMATION

CARCINOGENIC STATUS: Inorganic mercury compounds: ACGIH - Group A4, not classifiable as a human carcinogen; IARC - Group 3, not classifiable as to its carcinogenicity to humans.

TOXICOLOGICAL STATUS: Mercury compounds: California Proposition 65 – reproductive toxicant (developmental)
No other data available at this time.

XII. ECOLOGICAL INFORMATION

Mercuric nitrate is toxic 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: T – TOXIC, N – DANGEROUS FOR THE ENVIRONMENT
Risk Phrases: Toxic by inhalation, in contact with skin and if swallowed. Danger of cumulative effects. Toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

Safety Phrases: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). After contact with skin, wash immediately with plenty of water. This material and its container must be disposed of as hazardous waste. Keep away from food, drink and animal feeding stuffs. If swallowed, seek medical advice immediately and show container or label.

CANADIAN INFORMATION:

WHMIS Classification: D1A, 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, D009
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 and a mercury compound which are subject to the reporting requirements of Section 313 of SARA Title III.

CALIFORNIA PROPOSITION 65: This product contains a chemical known to the State of California as a reproductive toxicant.

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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S2000-1
Creation Date: 2012-10-03

I. CHEMICAL IDENTIFICATION

PRODUCT TRADE NAME: Activator Solution for Chloride Titrets® Kits
PRODUCT PART NO.: A-2000
COMPONENT OF KIT CATALOG NOS.:
K-2020, K-2050, K-2051, K-2055, K-2070
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

Harmful if swallowed.

NFPA RATINGS: HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 0
ACUTE TOXICITY: Irritation, nausea, headache, delayed pulmonary edema
CHRONIC TOXICITY: Irritation, liver and kidney lesions
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Eye and skin disorders, impaired liver and kidney function

III. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT:	Diphenylcarbazone	
CAS NO.:	538-62-5	PERCENT: < 0.1
COMPONENT:	2,5-Dihydroxybenzoic Acid	
CAS NO.:	490-79-9	PERCENT: 6
COMPONENT:	Diethylene Glycol	
CAS NO.:	111-46-6	PERCENT: 94

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 instructed by medical personnel. Seek medical advice.
INHALATION: Remove individual to fresh air. Seek medical advice.

V. FIRE FIGHTING MEASURES

FLASH POINT: 124°C AUTOIGNITION POINT: 224°C
FLAMMABILITY LIMITS: UPPER: 10.8% LOWER: 1.6%
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

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: None listed
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: Burnt orange
ODOR: None SPECIFIC GRAVITY: 1.12
SOLUBILITY IN WATER: Miscible pH: 1.85
BOILING POINT: 244°C MELTING / FREEZING POINT: -10°C
VAPOR PRESSURE: 1.12 mm Hg @ 15°C VAPOR DENSITY: 3.6

X. STABILITY AND REACTIVITY

INCOMPATIBILITIES: strong oxidizing agents, strong acids, strong bases
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

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 other kit components for transport information.

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

CANADIAN INFORMATION:
WHMIS Classification: D2A, D2B
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

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