

**CHEMetrics, Inc.**  
**4295 Catlett Rd., Calverton, VA 20138**  
**(800) 356-3072 (540) 788-9026**  
**Fax (540) 788-4856 E-mail technical@chemetrics.com**

**After Hours Emergency Nos.: (703) 447-9550**  
**(540) 272-3874**  
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## MATERIAL SAFETY DATA SHEET

### I. CHEMICAL IDENTIFICATION

TRADE NAME: NITRATE ACIDIFIER SOLUTION

CATALOG NO.: A-6901

DESCRIPTION: An accessory solution used in conjunction with reagent ampoules in the determination of nitrate in water. Each bottle contains approximately 18 mL of accessory solution.

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

### II. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT: Hydrochloric Acid, Concentrated  
CAS NO.: 7647-01-0 PERCENT: < 69.0

COMPONENT: Deionized Water  
CAS NO.: 7732-18-5 PERCENT: > 31.0

### III. HAZARDS IDENTIFICATION

Corrosive. Causes burns.

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

### 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. Never give anything by mouth to an unconscious person. Seek medical attention.

INHALATION: Remove 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: N/A AUTOIGNITION POINT: N/A  
FLAMMABILITY LIMITS: UPPER: N/A LOWER: N/A  
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. Ventilate spill area.

### VII. HANDLING AND STORAGE

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 120°F (49°C) or even below 32°F (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 if applicable, 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 MSDS.

### IX. PHYSICAL AND CHEMICAL PROPERTIES

STATE: Liquid APPEARANCE: Colorless ODOR: Pungent  
SOLUBILITY IN WATER: Complete pH: 0.1  
BOILING POINT: 100°C MELTING POINT: 0°C  
VAPOR PRESSURE: N/A SPECIFIC GRAVITY: 1.1  
VAPOR DENSITY: N/A

### 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 carbonate-based 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

### XV. REGULATORY INFORMATION

EUROPEAN INFORMATION:

EU Symbols: C - CORROSIVE

Risk Phrases: Causes burns. Irritating to respiratory system.

Safety Phrases: In case of contact with eyes or skin, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the 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

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.