RICCA CHEMICAL COMPANY®

Safety Data Sheet

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: VeriSpec® Mixed Cation Standard 11
0.1 ppm: Li^{+}, Na^{+}, NH_4^{+}, K^{+}, Ca^{2+}, Mg^{2+}, Mn^{2+}, Cu^{2+}, Fe^{3+}, Ni^{2+}, Zn^{2+} , Manufactu

Product Number: RV010760

Other Identifying Product Numbers: RV010760-100N

1.2. Recommended Use and Restrictions on Use

Calibration Standard

1.3. Details of the Supplier of the Safety Data Sheet

Company: Ricca Chemical Company

Address: 448 West Fork Drive
Arlington, TX 76012 USA

Telephone: 888-467-4222

1.4. Emergency Telephone Number (24 hr)

CHEMTREC (USA) 800-424-9300
CHEMTREC (International) 1+ 703-527-3887

SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture (in accordance with OSHA HCS 29 CFR 1910.1200)

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

This product is not categorized as hazardous in any GHS hazard class.

2.2. GHS Label Elements

Pictograms: None required.

Signal Word: None required.

Hazard Statements: None required.

Precautionary Statements: None required.

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2.3. WHMIS Classification

WHMIS classification is not included based on the recommended option (Option 4) found in the Canada Gazette Part II, Vol. 149, No.3, page 458

2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

SECTION 3: Composition / Information on Ingredients

3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	Weight%
Nitric Acid	HNO_3	63.01 g/mol	7697-37-2	0.20%
Lithium Nitrate	$LiNO_3$	68.94 g/mol	7790-69-4	0.00%
Magnesium Chloride Hexahydrate	$MgCl_2 \cdot 6H_2O$	95.21 g/mol	7786-30-3	0.00%
Sodium Nitrate	$NaNO_3$	84.99 g/mol	7631-99-4	0.00%
Potassium Chloride	KCl	74.55 g/mol	7447-40-7	0.00%
Ammonium Nitrate	NH_4NO_3	80.04 g/mol	6484-52-2	0.00%
Manganese Nitrate	$Mn(NO_3)_2$	178.94 g/mol	10377-66-9	0.00%

SECTION 4: First-Aid Measures

4.1. General First Aid Information

Eye Contact: No action required to be taken. If necessary, rinse eyes with water.

Inhalation: Not expected to require first aid. If necessary, remove to fresh air.

Skin Contact: No action required to be taken. If necessary, wash areas of contact with water.

Ingestion: No action required to be taken. If necessary, dilute with water.

4.2. Most Important Symptoms and Effects, Acute and Delayed

May cause mild irritation to areas of contact.

4.3. Medical Attention or Special Treatment Needed

Not expected to require special treatment.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Not considered to be a fire or explosion hazard.

5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard.

5.3. Special Protective Equipment for Firefighters

Wear protective clothing and NIOSH-approved breathing equipment appropriate for the surrounding fire.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear appropriate PPE for the size and nature of the spill. As a general rule, wear safety glasses and gloves.

6.2. Cleanup and Containment Methods and Materials

Absorb with suitable material and dispose of in accordance with local regulations.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

Protect from freezing and physical damage.

SECTION 8: Exposure Controls / Personal Protection

8.2. Exposure Controls

Engineering Controls: No specific controls are needed. Normal room ventilation is adequate.

Respiratory Protection: No specific controls are needed. Normal room ventilation is adequate

Skin Protection: No specific controls are needed.

Eye Protection: No specific controls are needed.

8.3. Personal Protective Equipment

As a general rule, wear safety glasses and gloves.

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SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Appearance: Data not available.
Physical State: Liquid
Odor: Data not available.
Odor Threshold: Data not available.
pH: Data not available.
Melting/Freezing Point: Data not available.
Initial Boiling Point /Range: Data not available.
Flash Point: Data not available.
Evaporation Rate: Data not available.
Flammability: Data not available.
Flammability/Explosive Limits: Data not available.
Vapor Pressure: Data not available.
Vapor Density: Data not available.
Relative Density: 1.07
Solubility: Data not available.
Partition Coeffieient (n-Octanol/Water): Data not available.
Auto-Ignition Temperature: Data not available.
Decomposition Temperature: Data not available.
Viscosity: Data not available.
ExplosiveProperties: Data not available.
Oxidizing Properties: Data not available.

SECTION 10: Stability and Reactivity

10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

10.2. Possibility of Hazardous Reactions

Data not available.

10.3. Conditions to Avoid and Incompatible Materials

Protect from freezing and physical damage.

10.4. Hazardous Decomposition Products

May emit irritating fumes when heated to decomposition.

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SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Not applicable.

Acute Toxicity - Dermal Exposure:

Not applicable.

Acute Toxicity - Inhalation Exposure:

Not applicable.

Acute Toxicity - Other Information:

Data not available.

Skin Corrosion and Irritation:

Not applicable.

Serious Eye Damage and Irritation:

Not applicable.

Respiratory Sensitization:

Not applicable.

Skin Sensitization:

Not applicable.

Germ Cell Mutagenicity:

Not applicable.

Carcinogenicity:

Not applicable.

Reproductive Toxicity:

Not applicable.

Specific Target Organ Toxicity from Single Exposure:

Not applicable.

Specific Target Organ Toxicity from Repeated Exposure:

Not applicable.

Aspiration Hazard:

Not applicable.

Additional Toxicology Information:

Data not available.

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SECTION 12: Ecological Information

12.1. Ecotoxicity

Not applicable.

12.2. Persistence and Degradability

Data not available.

12.3. Bioaccumulative Potential

Data not available.

12.4. Mobility in Soil

Data not available.

12.5. Other Adverse Ecological Effects

Data not available.

SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods

Data not available.

SECTION 14: Transportation Information

14.1. Transportation by Land - Department of Transportation (DOT, United States of America)

Not regulated according to DOT Regulations.

Not regulated according to IATA Regulations.

SECTION 15: Regulatory Information

15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Nitric Acid (CAS # 7697-37-2): 1000 lb EPCRA RQ
Nitric Acid (CAS # 7697-37-2): 1000 lb TPQ

15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Nitric Acid (CAS # 7697-37-2): 1000 lb final RQ; 454 kg final RQ

15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Manganese Nitrate (CAS # 10377-66-9): 1.0 % de minimis concentration (listed under Chemical Category N450)
Ammonium Nitrate (CAS # 6484-52-2): 1.0 % de minimis concentration (10% of total aqueous Ammonia is reportable under this listing)
Ammonium Nitrate (CAS # 6484-52-2): 1.0 % de minimis concentration (reportable only when in aqueous solution, Chemical Category N511)
Sodium Nitrate (CAS # 7631-99-4): 1.0 % de minimis concentration (reportable only when in aqueous solution, Chemical Category N511)
Nitric Acid (CAS # 7697-37-2): 1.0 % de minimis concentration
Lithium Nitrate (CAS # 7790-69-4): 1.0 % de minimis concentration (reportable only when in aqueous solution, Chemical Category N511)

15.5. Massachusetts Right-to-Know Substance List

Ammonium Nitrate (CAS # 6484-52-2): Present
Sodium Nitrate (CAS # 7631-99-4): Present
Nitric Acid (CAS # 7697-37-2): Extraordinarily hazardous

15.6. Pennsylvania Right-to-Know Hazardous Substances

Manganese Nitrate (CAS # 10377-66-9): Environmental hazard
Manganese Nitrate (CAS # 10377-66-9): Present
Ammonium Nitrate (CAS # 6484-52-2): Environmental hazard
Ammonium Nitrate (CAS # 6484-52-2): Present
Sodium Nitrate (CAS # 7631-99-4): Present
Nitric Acid (CAS # 7697-37-2): Environmental hazard
Nitric Acid (CAS # 7697-37-2): Present

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15.7. New Jersey Worker and Community Right-to-Know Components

Manganese Nitrate (CAS # 10377-66-9): sn 2324
Manganese Nitrate (CAS # 10377-66-9): SN 2324 500 lb TPQ (Category Code N450. Includes any unique chemical substance that contains the named metal as part of that chemical structure)
Manganese Nitrate (CAS # 10377-66-9): sn 3722
Manganese Nitrate (CAS # 10377-66-9): SN 3722 500 lb TPQ (water dissociable, Category Code N511)
Ammonium Nitrate (CAS # 6484-52-2): reactive - third degree
Ammonium Nitrate (CAS # 6484-52-2): sn 0106
Ammonium Nitrate (CAS # 6484-52-2): sn 3722
Ammonium Nitrate (CAS # 6484-52-2): SN 3722 500 lb TPQ (water dissociable, Category Code N511)
Sodium Nitrate (CAS # 7631-99-4): sn 3722
Sodium Nitrate (CAS # 7631-99-4): SN 3722 500 lb TPQ (water dissociable, Category Code N511)
Nitric Acid (CAS # 7697-37-2): corrosive; reactive - second degree
Nitric Acid (CAS # 7697-37-2): sn 1356
Nitric Acid (CAS # 7697-37-2): SN 1356 500 lb TPQ
Nitric Acid (CAS # 7697-37-2): sn 3722
Nitric Acid (CAS # 7697-37-2): SN 3722 500 lb TPQ (water dissociable, Category Code N511)
Lithium Nitrate (CAS # 7790-69-4): sn 1130
Lithium Nitrate (CAS # 7790-69-4): sn 3722
Lithium Nitrate (CAS # 7790-69-4): SN 3722 500 lb TPQ (water dissociable, Category Code N511)

15.8. California Proposition 65

Not listed.

15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Manganese Nitrate (CAS # 10377-66-9): Present (DSL)
Ammonium Nitrate (CAS # 6484-52-2): Present (DSL)
Potassium Chloride (CAS # 7447-40-7): Present (DSL)
Sodium Nitrate (CAS # 7631-99-4): Present (DSL)
Nitric Acid (CAS # 7697-37-2): Present (DSL)
Magnesium Chloride Hexahydrate (CAS # 7786-30-3): Present (DSL)
Lithium Nitrate (CAS # 7790-69-4): Present (DSL)

15.10. United States of America Toxic Substances Control Act (TSCA) List

Manganese Nitrate (CAS # 10377-66-9): Present
Ammonium Nitrate (CAS # 6484-52-2): Present
Potassium Chloride (CAS # 7447-40-7): Present
Sodium Nitrate (CAS # 7631-99-4): Present
Nitric Acid (CAS # 7697-37-2): Present
Magnesium Chloride Hexahydrate (CAS # 7786-30-3): Present
Lithium Nitrate (CAS # 7790-69-4): Present

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15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Not listed.

SECTION 16: Other Information

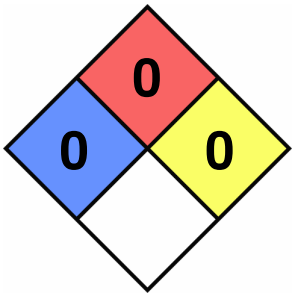
16.1. Full Text of Hazard Statements and Precautionary Statements

16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.
Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.
Health Hazards Not Otherwise Classified (HHNOC): Not Applicable.
Not Applicable.

16.3. National Fire Protection Association (NFPA) Rating

Health: 0
Flammability: 0
Reactivity: 0
Special Hazard:



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16.4. Document Revision

Last Revision Date: 9/15/2016

DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.