SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: VeriSpec® Calcium Standard 10 ppm

For Stray Light, Manufactured and Tested in an ISO 17025/Guide 34 Facility

Product Number: RV010810

Other Identifying Product Numbers: RV010810-500N

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%
Water	H₂O	18.01 g/mol	7732-18-5	89.60%
Nitric Acid	HNO₃	63.01 g/mol	7697-37-2	5.00%
Oxalic Acid Dihydrate	$C_2H_6O_6\cdot 2H_2O$	162.10 g/mol	6153-56-6	1.05%
Sodium Chloride	NaCl	58.44 g/mol	7647-14-5	1.03%
Ferric Nitrate	Fe(NO ₃) ₃	241.85 g/mol	10421-48-4	0.43%
Calcium Carbonate	CaCO₃	100.09 g/mol	471-34-1	0.41%
Aluminum Nitrate	Al(NO ₃) ₃	212.99 g/mol	13473-90-0	0.28%
Potassium Nitrate	KNO₃	101.10 g/mol	7757-79-1	0.26%
Hydrofluoric Acid	HF	20.00 g/mol	7664-39-3	0.20%

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.

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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: 1.01

Solubility: Data not available.

Partition Coefficient (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.

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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

Hydrofluoric Acid (CAS # 7664-39-3): 100 lb EPCRA RQ Hydrofluoric Acid (CAS # 7664-39-3): 100 lb TPQ 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

Ferric Nitrate (CAS # 10421-48-4): 1000 lb final RQ; 454 kg final RQ Hydrofluoric Acid (CAS # 7664-39-3): 100 lb final RQ; 45.4 kg final RQ 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)

Ferric Nitrate (CAS # 10421-48-4): 1.0 % de minimis concentration (reportable only when in aqueous solution, Chemical Category N511)

Hydrofluoric Acid (CAS # 7664-39-3): 1.0 % de minimis concentration

Nitric Acid (CAS # 7697-37-2): 1.0 % de minimis concentration

Potassium Nitrate (CAS # 7757-79-1): 1.0 % de minimis concentration (reportable only when in aqueous solution, Chemical Category N511)

15.5. Massachusetts Right-to-Know Substance List

Ferric Nitrate (CAS # 10421-48-4): Present
Calcium Carbonate (CAS # 471-34-1): Present
Oxalic Acid Dihydrate (CAS # 6153-56-6): Present
Hydrofluoric Acid (CAS # 7664-39-3): Extraordinarily hazardous
Nitric Acid (CAS # 7697-37-2): Extraordinarily hazardous
Potassium Nitrate (CAS # 7757-79-1): Present

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15.6. Pennsylvania Right-to-Know Hazardous Substances

Ferric Nitrate (CAS # 10421-48-4): Environmental hazard

Ferric Nitrate (CAS # 10421-48-4): Present

Calcium Carbonate (CAS # 471-34-1): Present

Oxalic Acid Dihydrate (CAS # 6153-56-6): Present

Hydrofluoric Acid (CAS # 7664-39-3): Environmental hazard

Hydrofluoric Acid (CAS # 7664-39-3): Present

Nitric Acid (CAS # 7697-37-2): Environmental hazard

Nitric Acid (CAS # 7697-37-2): Present

Water (CAS # 7732-18-5): Present

Potassium Nitrate (CAS # 7757-79-1): Present

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

Ferric Nitrate (CAS # 10421-48-4): sn 0924

Ferric Nitrate (CAS # 10421-48-4): sn 3722

Ferric Nitrate (CAS # 10421-48-4): SN 3722 500 lb TPQ (water dissociable, Category Code N511)

Aluminum Nitrate (CAS # 13473-90-0): sn 0061

Aluminum Nitrate (CAS # 13473-90-0): sn 3722

Aluminum Nitrate (CAS # 13473-90-0): SN 3722 500 lb TPQ (water dissociable, Category Code N511)

Calcium Carbonate (CAS # 471-34-1): sn 4001

Oxalic Acid Dihydrate (CAS # 6153-56-6): corrosive

Oxalic Acid Dihydrate (CAS # 6153-56-6): sn 1445

Hydrofluoric Acid (CAS # 7664-39-3): corrosive

Hydrofluoric Acid (CAS # 7664-39-3): sn 0936

Hydrofluoric Acid (CAS # 7664-39-3): sn 3759

Hydrofluoric Acid (CAS # 7664-39-3): SN 3759 100 lb TPQ; SN 1014 500 lb TPQ (Hydrogen fluoride gas only)

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)

Potassium Nitrate (CAS # 7757-79-1): sn 1574

Potassium Nitrate (CAS # 7757-79-1): sn 3722

Potassium Nitrate (CAS # 7757-79-1): SN 3722 500 lb TPQ (water dissociable, Category Code N511)

15.8. California Proposition 65

Not listed.

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

Ferric Nitrate (CAS # 10421-48-4): Present (DSL)

Aluminum Nitrate (CAS # 13473-90-0): Present (DSL)

Calcium Carbonate (CAS # 471-34-1): Present (DSL)

Calcium Carbonate (CAS # 471-34-1): Present (NDSL)

Oxalic Acid Dihydrate (CAS # 6153-56-6): Present (DSL)

Sodium Chloride (CAS # 7647-14-5): Present (DSL)

Hydrofluoric Acid (CAS # 7664-39-3): Present (DSL)

Nitric Acid (CAS # 7697-37-2): Present (DSL)

Water (CAS # 7732-18-5): Present (DSL)

Potassium Nitrate (CAS # 7757-79-1): Present (DSL)

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

Ferric Nitrate (CAS # 10421-48-4): Present

Aluminum Nitrate (CAS # 13473-90-0): Present

Calcium Carbonate (CAS # 471-34-1): Present

Oxalic Acid Dihydrate (CAS # 6153-56-6): Present [T]

Sodium Chloride (CAS # 7647-14-5): Present

Hydrofluoric Acid (CAS # 7664-39-3): Present [T]

Nitric Acid (CAS # 7697-37-2): Present

Water (CAS # 7732-18-5): Present

Potassium Nitrate (CAS # 7757-79-1): Present

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.

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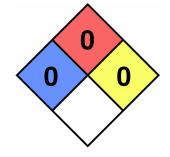
16.3. National Fire Protection Association (NFPA) Rating

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.

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