

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: VeriSpec® Single Element Environmental Standard 100 mg/L Hg, Manufactured and Tested in an ISO 17025/Guide 34 Facility

Product Number: RV010843

Other Identifying Product Numbers: RV010843-100N

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.

| Hazard | | | |
|--|-------------|-----------|--|
| Hazard Class | Category | Statement | Precautionary Statements |
| Skin Corrosion / Irritation | Category 1A | H314 | P260, P264, P280, P301+P330+P331, |
| | | | P303+P361+P353, P363, P304+P340, P310, |
| | | | P321, P305+P351+P338, P405, P501 |
| Corrosive to Metals | Category 1 | H290 | P234, P390, P406 |
| Hazardous to the Aquatic Environment (Acute) | Category 3 | H402 | P273, P501 |

2.2. GHS Label Elements

Pictograms:



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Signal Word: Danger

Hazard Statements:

| Hazard Number | Hazard Statement |
|---------------|--|
| H290 | May be corrosive to metals. |
| H314 | Causes severe skin burns and eye damage. |
| H402 | Harmful to aquatic life. |

Precautionary Statements:

| Precautionary Number | Precautionary Statement |
|----------------------|---|
| P234 | Keep only in original container. |
| P260 | Do not breathe fumes, mist, vapors, or spray. |
| P264 | Wash arms, hands and face thoroughly after handling. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves and eye protection. |
| P301+P330+P331 | IF SWALLOWED: rinse mouth. Do NOT induce vomiting. |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy |
| | to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTER or physician. |
| P321 | Specific treatment (Wash areas of contact with water immediately). |
| P363 | Wash contaminated clothing before reuse. |
| P390 | Absorb spillage to prevent material damage. |
| P405 | Store locked up. |
| P406 | Store in corrosive resistant container with a resistant inner liner. |
| P501 | Dispose of contents in accordance with local, state, federal and international regulations. |

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.

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SECTION 3: Composition / Information on Ingredients

3.1. Components of Substance or Mixture

| Chemical Name | Formula | Molecular Weight | CAS Number | Weight% |
|------------------|-----------------------------------|------------------|------------|---------|
| Nitric Acid | HNO₃ | 63.01 g/mol | 7697-37-2 | 5.00% |
| Mercuric Nitrate | Hg(NO ₃) ₂ | 324.59 g/mol | 10045-94-0 | 0.02% |

SECTION 4: First-Aid Measures

4.1. General First Aid Information

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Inhalation: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Skin Contact: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

Ingestion: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

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

Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water immediately).

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 protective gloves and eye protection.

6.2. Cleanup and Containment Methods and Materials

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

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SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

Store in corrosive resistant container with a resistant inner liner.

SECTION 8: Exposure Controls / Personal Protection

8.1. Control Parameters

| Chemical Name | Limit Type | Country | Exposure Limit | Information Source |
|-------------------------------|------------|---------|-------------------------------------|--|
| Mercuric Nitrate (10045-94-0) | TLV-TWA | USA | 0.025 mg/m ³ TWA (as Hg) | ACGIH - Threshold Limit Values - Time |
| | | | | Weighted Averages (TLV-TWA) |
| Nitric Acid (7697-37-2) | TWA | USA | 2 ppm TWA | U.S OSHA - Final PELs - Time |
| | | | 5 mg/m³ TWA | Weighted Averages (TWAs) |
| Nitric Acid (7697-37-2) | TLV-STEL | USA | 4 ppm STEL | ACGIH - Threshold Limit Values - Short |
| | | | | Term Exposure Limits (TLV-STEL) |
| Nitric Acid (7697-37-2) | TLV-TWA | USA | 2 ppm TWA | ACGIH - Threshold Limit Values - Time |
| | | | | Weighted Averages (TLV-TWA) |

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: Wear protective gloves and eye protection.

Eye Protection: Wear protective gloves and eye protection.

8.3. Personal Protective Equipment

Wear protective gloves and eye protection.

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SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

| A 11 10 0 10 10 0 0 0 0 0 0 0 0 0 0 0 0 | Data nat available |
|--|---------------------|
| •• | 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: | 1.03 |
| 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** Keep only in original container.
- **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:

Causes severe skin burns and eye damage. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water immediately). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

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.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Harmful to aquatic life. Avoid release to the environment. Dispose of contents in accordance with local, state, federal and international regulations.

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)

| Sizes: | 100 mL |
|------------------------|---|
| UN Number: | UN3264 |
| Proper Shipping Name: | Corrosive Liquid, Acidic, Inorganic, n.o.s. (Nitric Acid) |
| Hazard Class: | 8 |
| Packing Group: | II |
| Hazard Placard Labels: | CORROSIVE 8 |



Sizes: **UN Number: Proper Shipping Name: Hazard Class: Packing Group: Hazard Placard Labels:**

14.2. Transportation by Air - International Air Transport Association (IATA)

| Sizes: | 100 mL |
|------------------------|---|
| UN Number: | UN3264 |
| Proper Shipping Name: | Corrosive Liquid, Acidic, Inorganic, n.o.s. (Nitric Acid) |
| Hazard Class: | 8 |
| Packing Group: | II |
| Hazard Placard Labels: | CORROSIVE |

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 Mercuric Nitrate (CAS # 10045-94-0): 10 lb final RQ; 4.54 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) Mercuric Nitrate (CAS # 10045-94-0): 1.0 % Supplier notification limit (listed under Chemical Category N458) Mercuric Nitrate (CAS # 10045-94-0): 10 lb RT

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

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15.5. Massachusetts Right-to-Know Substance List

Mercuric Nitrate (CAS # 10045-94-0): Present Nitric Acid (CAS # 7697-37-2): Extraordinarily hazardous

15.6. Pennsylvania Right-to-Know Hazardous Substances

Mercuric Nitrate (CAS # 10045-94-0): Environmental hazard Mercuric Nitrate (CAS # 10045-94-0): Present Nitric Acid (CAS # 7697-37-2): Environmental hazard Nitric Acid (CAS # 7697-37-2): Present

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

Mercuric Nitrate (CAS # 10045-94-0): corrosive Mercuric Nitrate (CAS # 10045-94-0): sn 1173 Mercuric Nitrate (CAS # 10045-94-0): sn 1183 Mercuric Nitrate (CAS # 10045-94-0): SN 2414 500 lb TPQ (Category Code N458. Includes any unique chemical substance that contains the named metal as part of that chemical structure) Mercuric Nitrate (CAS # 10045-94-0): sn 3722 Mercuric Nitrate (CAS # 10045-94-0): 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 Nitric Acid (CAS # 7697-37-2): SN 3722 500 lb TPQ Nitric Acid (CAS # 7697-37-2): SN 3722 500 lb TPQ Nitric Acid (CAS # 7697-37-2): SN 3722 500 lb TPQ Nitric Acid (CAS # 7697-37-2): SN 3722 500 lb TPQ Nitric Acid (CAS # 7697-37-2): SN 3722 500 lb TPQ Nitric Acid (CAS # 7697-37-2): SN 3722 500 lb TPQ Nitric Acid (CAS # 7697-37-2): SN 3722 500 lb TPQ (water dissociable, Category Code N511)

15.8. California Proposition 65

Mercuric Nitrate (CAS # 10045-94-0): developmental toxicity, 7/1/1990

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

Mercuric Nitrate (CAS # 10045-94-0): Present (DSL) Nitric Acid (CAS # 7697-37-2): Present (DSL)

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

Mercuric Nitrate (CAS # 10045-94-0): Present Nitric Acid (CAS # 7697-37-2): 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.

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SECTION 16: Other Information

16.1. Full Text of Hazard Statements and Precautionary Statements

May be corrosive to metals. Causes severe skin burns and eye damage. Harmful to aquatic life.

Keep only in original container. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Avoid release to the environment. Wear protective gloves and eye protection.

IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water immediately). Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.

Store locked up. Store in corrosive resistant container with a resistant inner liner.

Dispose of contents in accordance with local, state, federal and international regulations.

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: 3 Flammability: 0 Reactivity: 0 Special Hazard:





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.