

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: VeriSpec® ICV Standard 21

500 ppm: Ca, Mg, K, Na; 200 ppm Ba, Al; 100 ppm Fe, 60 ppm Sb; 50 ppm Co, V; 40 ppm Ni, 25 ppm Cu, 2

Product Number: RV010772

Other Identifying Product Numbers: RV010772-100N

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% |
|------------------------|--|------------------|------------|---------|
| Water | H₂O | 18.01 g/mol | 7732-18-5 | 93.74% |
| Nitric Acid | | 63.01 g/mol | 7697-37-2 | 5.00% |
| Magnesium Nitrate | Mg(NO ₃) ₂ | 148.31 g/mol | 10377-60-3 | 0.31% |
| Aluminum Nitrate | AI(NO ₃) ₃ | 212.99 g/mol | 13473-90-0 | 0.28% |
| Calcium Nitrate | Ca(NO ₃) ₂ | 164.08 g/mol | 10124-37-5 | 0.20% |
| Sodium Nitrate | NaNO ₃ | 84.99 g/mol | 7631-99-4 | 0.18% |
| Potassium Nitrate | KNO₃ | 101.10 g/mol | 7757-79-1 | 0.13% |
| Ferric Nitrate | Fe(NO ₃) ₃ | 241.85 g/mol | 10421-48-4 | 0.04% |
| Barium Nitrate | Ba(NO ₃) ₂ | 261.33 g/mol | 10022-31-8 | 0.04% |
| Cobalt (II) Nitrate | Co(NO ₃) ₂ | 182.94 g/mol | 10141-05-6 | 0.02% |
| Nickel (II) Nitrate | Ni(NO ₃) ₂ | 182.70 g/mol | 13138-45-9 | 0.01% |
| Fluoroantimonic Acid | HSbF₀ | 236.76 g/mol | 16950-06-4 | 0.01% |
| Ammonium Metavanadate | NH_4VO_3 | 116.97 g/mol | 7803-55-6 | 0.01% |
| Cupric Nitrate | Cu(NO ₃) ₂ ·xH ₂ O | 251.10 g/mol | 3251-23-8 | 0.01% |
| Zinc Nitrate | Zn(NO ₃) ₂ | 189.41 g/mol | 7779-88-6 | 0.01% |
| Manganese Nitrate | Mn(NO ₃) ₂ | 178.94 g/mol | 10377-66-9 | 0.00% |
| Chromium (III) Nitrate | Cr(NO ₃) ₃ | 238.01 g/mol | 13548-38-4 | 0.00% |
| Arsenic Acid | H₃AsO₄ | 141.94 g/mol | 7778-39-4 | 0.00% |
| Silver Nitrate | AgNO₃ | 169.87 g/mol | 7761-88-8 | 0.00% |
| Thallium (I) Nitrate | TINO3 | 266.38 g/mol | 10102-45-1 | 0.00% |
| Cadmium Nitrate | CdN ₂ O ₆ | 236.42 g/mol | 10325-94-7 | 0.00% |
| Selenous Acid | H₂SeO₃ | 128.97 g/mol | 7783-00-8 | 0.00% |
| Lead Nitrate | Pb(NO ₃) ₂ | 331.20 g/mol | 10099-74-8 | 0.00% |

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.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

Store in corrosive resistant container with a resistant inner liner.

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SECTION 8: Exposure Controls / Personal Protection

8.1. Control Parameters

| Chemical Name | Limit Type | Country | Exposure Limit | Information Source |
|--|------------|---------|---|--|
| Arsenic Acid (7778-39-4) | TWA | USA | 10 μg/m³ TWA (as As) | U.S OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Arsenic Acid (7778-39-4) | TLV-TWA | USA | 0.01 mg/m ³ TWA (as As) | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Arsenic Acid (7778-39-4) | PEL | USA | 10 μg/m ³ TWA (Cancer hazard, See 29 CFR 1910.1018, except Arsine, as As) 5 μg/m ³ Action Level (as As) | U.S OSHA - Specifically Regulated |
| Barium Nitrate (10022-31-8) | TWA | USA | 0.5 mg/m ³ TWA (as Ba) | U.S OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Barium Nitrate (10022-31-8) | TLV-TWA | USA | 0.5 mg/m³ TWA (as Ba) | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Cadmium Nitrate (10325-94-7) | TLV-TWA | USA | 0.01 mg/m ³ TWA (as Cd) 0.002 mg/m ³ TWA (respirable fraction, as Cd) | ACGIH - Threshold Limit Values - Time |
| Cadmium Nitrate (10325-94-7) | PEL | USA | 5 μg/m ³ TWA (Do not eat, drink or chew tobacco or gum or apply cosmetics in regulated areas. Carcinogen - dust can cause lung and kidney disease. See 29 CFR 1910.1027, as Cd) 2.5 μg/m ³ Action Level (as Cd) | U.S OSHA - Specifically Regulated Chemicals with PELs |
| Chromium (III) Nitrate (13548-38-4) | TWA | USA | 0.5 mg/m³ TWA (as Cr) | U.S OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Chromium (III) Nitrate (13548-38-4) | TLV-TWA | USA | 0.5 mg/m³ TWA (as Cr) | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Cobalt (II) Nitrate (10141-05-6) | TLV-TWA | USA | 0.02 mg/m³ TWA (as Co) | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Cupric Nitrate (3251-23-8) | TLV-TWA | USA | 1 mg/m ³ TWA (dust and mist, as Cu) | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Ferric Nitrate (10421-48-4) | TLV-TWA | USA | 1 mg/m³ TWA (as Fe) | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Fluoroantimonic Acid (16950-06-4) | TWA | USA | 0.5 mg/m³ TWA (as Sb) | U.S OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Fluoroantimonic Acid (16950-06-4) | TLV-TWA | USA | 0.5 mg/m³ TWA (as Sb) | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Lead Nitrate (10099-74-8) | TWA | USA | 50 μg/m³ TWA (as Pb) | U.S OSHA - Final PELs - Time Weighted Averages (TWAs) |

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| Lead Nitrate (10099-74-8) | TLV-TWA | USA | 0.05 mg/m ³ TWA (as Pb) | ACGIH - Threshold Limit Values - Time |
|---|-------------|---------------------------------------|---|--|
| Lead Milale (10099-74-0) | | 034 | 0.03 mg/m² 1 WA (as 1 b) | Weighted Averages (TLV-TWA) |
| Lead Nitrate (10099-74-8) | PEL | USA | 30 µg/m ³ Action Level (Poison, See 29 | |
| Lead Milale (10099-74-8) | FEL | USA | CFR 1910.1025, as Pb) | Chemicals with PELs |
| | | | 50 µg/m ³ TWA (as Pb) | Chemicals with FELS |
| Manganese Nitrate (10377-66-9) | TLV-TWA | USA | 0.02 mg/m ³ TWA (as Fb) | ACGIH - Threshold Limit Values - Time |
| Manganese Mirale (10377-00-9) | | USA | as Mn) | Weighted Averages (TLV-TWA) |
| | | | 0.1 mg/m ³ TWA (inhalable fraction, as | Weighted Averages (TEV-TWA) |
| | | | Mn) | |
| Manganese Nitrate (10377-66-9) | PEL-Ceiling | USA | 5 mg/m ³ Ceiling (as Mn) | U.S OSHA - Final PELs - Ceiling Limits |
| Nickel (II) Nitrate (13138-45-9) | TWA | USA | 1 mg/m ³ TWA (as Ni) | U.S OSHA - Final PELs - Time |
| | | | 3 (442) | Weighted Averages (TWAs) |
| Nickel (II) Nitrate (13138-45-9) | TLV-TWA | USA | 0.1 mg/m ³ TWA (inhalable fraction, as | ACGIH - Threshold Limit Values - Time |
| | | | Ni) | Weighted Averages (TLV-TWA) |
| Nitric Acid (7697-37-2) | TWA | USA | 2 ppm TWA | U.S OSHA - Final PELs - Time |
| | | | 5 mg/m ³ 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) |
| Selenous Acid (7783-00-8) | TWA | USA | 0.2 mg/m³ TWA (as Se) | U.S OSHA - Final PELs - Time |
| | | | | Weighted Averages (TWAs) |
| Selenous Acid (7783-00-8) | TLV-TWA | USA | 0.2 mg/m³ TWA (as Se) | ACGIH - Threshold Limit Values - Time |
| | | | | Weighted Averages (TLV-TWA) |
| Silver Nitrate (7761-88-8) | TWA | USA | 0.01 mg/m³ TWA (as Ag) | U.S OSHA - Final PELs - Time |
| | | | | Weighted Averages (TWAs) |
| Silver Nitrate (7761-88-8) | TLV-TWA | USA | 0.01 mg/m³ TWA (as Ag) | ACGIH - Threshold Limit Values - Time |
| | | | | Weighted Averages (TLV-TWA) |
| Thallium (I) Nitrate (10102-45-1) | TWA | USA | 0.1 mg/m ³ TWA (as TI) | U.S OSHA - Final PELs - Time |
| | | | | Weighted Averages (TWAs) |
| Thallium (I) Nitrate (10102-45-1) TLV-TWA USA 0.02 mg/m ³ TWA (inhalable fraction, as ACGIH - Threshold Li | | ACGIH - Threshold Limit Values - Time | | |
| | | | TI) | 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: | 1.09 |
| 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. |
| 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

Lead Nitrate (CAS # 10099-74-8): 30 µg/m3 Action Level (See 29 CFR 1910.1025, as Pb); 50 µg/m3 TWA (See 29 CFR 1910.1025, as Pb) Cadmium Nitrate (CAS # 10325-94-7): 5 µg/m3 TWA (See 29 CFR 1910.1027, as Cd); 2.5 µg/m3 Action Level (as Cd) Arsenic Acid (CAS # 7778-39-4): 10 µg/m3 TWA (See 29 CFR 1910.1018, except Arsine, as As); 5 µg/m3 Action Level (See 29 CFR 1910.1018, except Arsine, as As)

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 Selenous Acid (CAS # 7783-00-8): 10 lb EPCRA RQ Selenous Acid (CAS # 7783-00-8): 1000 lb lower TPQ; 10000 lb upper TPQ

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

Lead Nitrate (CAS # 10099-74-8): 10 lb final RQ; 4.54 kg final RQ Thallium (I) Nitrate (CAS # 10102-45-1): 100 lb final RQ; 45.4 kg final RQ Ferric Nitrate (CAS # 10421-48-4): 1000 lb final RQ; 454 kg final RQ Nickel (II) Nitrate (CAS # 13138-45-9): 100 lb final RQ; 45.4 kg final RQ Cupric Nitrate (CAS # 3251-23-8): 100 lb final RQ; 45.4 kg final RQ Nitric Acid (CAS # 7697-37-2): 1000 lb final RQ; 45.4 kg final RQ Silver Nitrate (CAS # 7761-88-8): 1 lb final RQ; 0.454 kg final RQ Arsenic Acid (CAS # 7778-39-4): 1 lb final RQ; 0.454 kg final RQ Zinc Nitrate (CAS # 7779-88-6): 1000 lb final RQ; 45.4 kg final RQ Selenous Acid (CAS # 7783-00-8): 10 lb final RQ; 4.54 kg final RQ

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

Barium Nitrate (CAS # 10022-31-8): 1.0 % de minimis concentration (does not include Barium sulfate CAS 7727-43-7, Chemical Category N040) Barium Nitrate (CAS # 10022-31-8): 1.0 % de minimis concentration (reportable only when in aqueous solution, Chemical Category N511) Lead Nitrate (CAS # 10099-74-8): 0.1 % Supplier notification limit (listed under Chemical Category N420) Lead Nitrate (CAS # 10099-74-8): 1.0 % de minimis concentration (reportable only when in aqueous solution, Chemical Category N511) Lead Nitrate (CAS # 10099-74-8): 100 lb RT Thallium (I) Nitrate (CAS # 10102-45-1): 1.0 % de minimis concentration (listed under Chemical Category N760) Calcium Nitrate (CAS # 10124-37-5): 1.0 % de minimis concentration (reportable only when in aqueous solution, Chemical Category N511) Cobalt (II) Nitrate (CAS # 10141-05-6): 0.1 % de minimis concentration (listed under Chemical Category N096) Cadmium Nitrate (CAS # 10325-94-7): 0.1 % de minimis concentration (listed under Chemical Category N078) Cadmium Nitrate (CAS # 10325-94-7): 1.0 % de minimis concentration (reportable only when in aqueous solution, Chemical Category N511) Magnesium Nitrate (CAS # 10377-60-3): 1.0 % de minimis concentration (reportable only when in aqueous solution, Chemical Category N511) Manganese Nitrate (CAS # 10377-66-9): 1.0 % de minimis concentration (listed under Chemical Category N450) Ferric Nitrate (CAS # 10421-48-4): 1.0 % de minimis concentration (reportable only when in aqueous solution, Chemical Category N511) Nickel (II) Nitrate (CAS # 13138-45-9): 0.1 % de minimis concentration (listed under Chemical Category N495) Chromium (III) Nitrate (CAS # 13548-38-4): 1.0 % de minimis concentration (except for Chromite ore mined in the Transvaal Region of South Africa and the unreacted ore component of the Chromite ore processing residue (COPR), Chemical Category N090) Fluoroantimonic Acid (CAS # 16950-06-4): 1.0 % de minimis concentration (listed under Chemical Category N010) Cupric Nitrate



15.5. Massachusetts Right-to-Know Substance List

Barium Nitrate (CAS # 10022-31-8): Present Lead Nitrate (CAS # 10099-74-8): Present Thallium (I) Nitrate (CAS # 10102-45-1): Present Cobalt (II) Nitrate (CAS # 10141-05-6): Present Magnesium Nitrate (CAS # 10377-60-3): Present Ferric Nitrate (CAS # 10421-48-4): Present Nickel (II) Nitrate (CAS # 13138-45-9): Present Cupric Nitrate (CAS # 3251-23-8): Present Sodium Nitrate (CAS # 7631-99-4): Present Nitric Acid (CAS # 7697-37-2): Extraordinarily hazardous Potassium Nitrate (CAS # 7757-79-1): Present Silver Nitrate (CAS # 7761-88-8): Present Arsenic Acid (CAS # 7778-39-4): Present Zinc Nitrate (CAS # 7779-88-6): Present Selenous Acid (CAS # 7783-00-8): Extraordinarily hazardous Ammonium Metavanadate (CAS # 7803-55-6): Present

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15.6. Pennsylvania Right-to-Know Hazardous Substances

Barium Nitrate (CAS # 10022-31-8): Environmental hazard Barium Nitrate (CAS # 10022-31-8): Present Lead Nitrate (CAS # 10099-74-8): Environmental hazard Lead Nitrate (CAS # 10099-74-8): Present Thallium (I) Nitrate (CAS # 10102-45-1): Environmental hazard Thallium (I) Nitrate (CAS # 10102-45-1): Present Cobalt (II) Nitrate (CAS # 10141-05-6): Environmental hazard Cobalt (II) Nitrate (CAS # 10141-05-6): Present Cadmium Nitrate (CAS # 10325-94-7): Environmental hazard Cadmium Nitrate (CAS # 10325-94-7): Present Magnesium Nitrate (CAS # 10377-60-3): Present Manganese Nitrate (CAS # 10377-66-9): Environmental hazard Manganese Nitrate (CAS # 10377-66-9): Present Ferric Nitrate (CAS # 10421-48-4): Environmental hazard Ferric Nitrate (CAS # 10421-48-4): Present Nickel (II) Nitrate (CAS # 13138-45-9): Environmental hazard Nickel (II) Nitrate (CAS # 13138-45-9): Present Chromium (III) Nitrate (CAS # 13548-38-4): Environmental hazard Chromium (III) Nitrate (CAS # 13548-38-4): Present Fluoroantimonic Acid (CAS # 16950-06-4): Environmental hazard Fluoroantimonic Acid (CAS # 16950-06-4): Present Cupric Nitrate (CAS # 3251-23-8): Environmental hazard Cupric Nitrate (CAS # 3251-23-8): Present Sodium Nitrate (CAS # 7631-99-4): 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 Silver Nitrate (CAS # 7761-88-8): Environmental hazard Silver Nitrate (CAS # 7761-88-8): Present Arsenic Acid (CAS # 7778-39-4): Environmental hazard Arsenic Acid (CAS # 7778-39-4): Present Zinc Nitrate (CAS # 7779-88-6): Environmental hazard Zinc Nitrate (CAS # 7779-88-6): Present Selenous Acid (CAS # 7783-00-8): Environmental hazard Selenous Acid (CAS # 7783-00-8): Present Ammonium Metavanadate (CAS # 7803-55-6): Environmental hazard Ammonium Metavanadate (CAS # 7803-55-6): Present

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15.7. New Jersey Worker and Community Right-to-Know Components Barium Nitrate (CAS # 10022-31-8): sn 0186 Barium Nitrate (CAS # 10022-31-8): sn 2146 Barium Nitrate (CAS # 10022-31-8): SN 2146 500 lb TPQ (except Barium sulfate, Category Code N040.) Barium Nitrate (CAS # 10022-31-8): sn 3722 Barium Nitrate (CAS # 10022-31-8): SN 3722 500 lb TPQ (water dissociable, Category Code N511) Lead Nitrate (CAS # 10099-74-8): carcinogen Lead Nitrate (CAS # 10099-74-8): carcinogen; teratogen Lead Nitrate (CAS # 10099-74-8): sn 1108 Lead Nitrate (CAS # 10099-74-8): sn 2266 Lead Nitrate (CAS # 10099-74-8): SN 2266 500 lb TPQ (Category Code N420. Includes any unique chemical substance that contains the named metal as part of that chemical structure) Lead Nitrate (CAS # 10099-74-8): sn 3722 Lead Nitrate (CAS # 10099-74-8): SN 3722 500 lb TPQ (water dissociable, Category Code N511) Thallium (I) Nitrate (CAS # 10102-45-1): sn 1841 Thallium (I) Nitrate (CAS # 10102-45-1): sn 2809 Thallium (I) Nitrate (CAS # 10102-45-1): SN 2809 500 lb TPQ (Category Code N760. Includes any unique chemical substance that contains the named metal as part of that chemical structure) Thallium (I) Nitrate (CAS # 10102-45-1): sn 3722 Thallium (I) Nitrate (CAS # 10102-45-1): SN 3722 500 lb TPQ (water dissociable, Category Code N511) Calcium Nitrate (CAS # 10124-37-5): sn 0324 Calcium Nitrate (CAS # 10124-37-5): sn 3722 Calcium Nitrate (CAS # 10124-37-5): SN 3722 500 lb TPQ (water dissociable, Category Code N511) Cobalt (II) Nitrate (CAS # 10141-05-6): carcinogen Cobalt (II) Nitrate (CAS # 10141-05-6): sn 2222 Cobalt (II) Nitrate (CAS # 10141-05-6): SN 2222 500 lb TPQ (Category Code N096) Cobalt (II) Nitrate (CAS # 10141-05-6): sn 3722 Cobalt (II) Nitrate (CAS # 10141-05-6): SN 3722 500 lb TPQ (water dissociable, Category Code N511) Cadmium Nitrate (CAS # 10325-94-7): carcinogen Cadmium Nitrate (CAS # 10325-94-7): sn 2199 Cadmium Nitrate (CAS # 10325-94-7): SN 2199 500 lb TPQ (Category Code N078) Cadmium Nitrate (CAS # 10325-94-7): sn 3722 Cadmium Nitrate (CAS # 10325-94

15.8. California Proposition 65

Lead Nitrate (CAS # 10099-74-8): carcinogen, 10/1/1992 Cadmium Nitrate (CAS # 10325-94-7): carcinogen, 10/1/1987 Nickel (II) Nitrate (CAS # 13138-45-9): carcinogen, 5/7/2004 Arsenic Acid (CAS # 7778-39-4): 0.06 µg/day NSRL (inhalation, listed under Arsenic); 10 µg/day NSRL (except inhalation, listed under Arsenic) Arsenic Acid (CAS # 7778-39-4): carcinogen, 2/27/1987

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

Barium Nitrate (CAS # 10022-31-8): Present (DSL) Lead Nitrate (CAS # 10099-74-8): Present (DSL) Thallium (I) Nitrate (CAS # 10102-45-1): Present (NDSL) Calcium Nitrate (CAS # 10124-37-5): Present (DSL) Cobalt (II) Nitrate (CAS # 10141-05-6): Present (DSL) Cadmium Nitrate (CAS # 10325-94-7): Present (DSL) Magnesium Nitrate (CAS # 10377-60-3): Present (DSL) Manganese Nitrate (CAS # 10377-66-9): Present (DSL) Ferric Nitrate (CAS # 10421-48-4): Present (DSL) Nickel (II) Nitrate (CAS # 13138-45-9): Present (DSL) Aluminum Nitrate (CAS # 13473-90-0): Present (DSL) Chromium (III) Nitrate (CAS # 13548-38-4): Present (DSL) Fluoroantimonic Acid (CAS # 16950-06-4): Present (NDSL) Cupric Nitrate (CAS # 3251-23-8): Present (DSL) Sodium Nitrate (CAS # 7631-99-4): 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) Silver Nitrate (CAS # 7761-88-8): Present (DSL) Arsenic Acid (CAS # 7778-39-4): Present (DSL) Zinc Nitrate (CAS # 7779-88-6): Present (DSL) Selenous Acid (CAS # 7783-00-8): Present (DSL) Ammonium Metavanadate (CAS # 7803-55-6): Present (DSL)

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

Barium Nitrate (CAS # 10022-31-8): Present Lead Nitrate (CAS # 10099-74-8): Present Thallium (I) Nitrate (CAS # 10102-45-1): Present Calcium Nitrate (CAS # 10124-37-5): Present Cobalt (II) Nitrate (CAS # 10141-05-6): Present Cadmium Nitrate (CAS # 10325-94-7): Present Magnesium Nitrate (CAS # 10377-60-3): Present Manganese Nitrate (CAS # 10377-66-9): Present Ferric Nitrate (CAS # 10421-48-4): Present Nickel (II) Nitrate (CAS # 13138-45-9): Present Aluminum Nitrate (CAS # 13473-90-0): Present Chromium (III) Nitrate (CAS # 13548-38-4): Present Fluoroantimonic Acid (CAS # 16950-06-4): Present Cupric Nitrate (CAS # 3251-23-8): Present Sodium Nitrate (CAS # 7631-99-4): Present Nitric Acid (CAS # 7697-37-2): Present Water (CAS # 7732-18-5): Present Potassium Nitrate (CAS # 7757-79-1): Present Silver Nitrate (CAS # 7761-88-8): Present Arsenic Acid (CAS # 7778-39-4): Present Zinc Nitrate (CAS # 7779-88-6): Present Selenous Acid (CAS # 7783-00-8): Present Ammonium Metavanadate (CAS # 7803-55-6): 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.