### **SECTION 1: Identification**

#### 1.1. Product Identifier

Trade Name or Designation: VeriSpec™ Uranium Standard for ICP 10 g/L in 5% HNO₃

Manufactured and Tested in an ISO 17025/Guide 34 Accredited Facility

Product Number: RV010426

Other Identifying Product Numbers: RV010426-100N, RV010426-250N, RV010426-500N

#### 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.

	Hazard			
Hazard Class	Category	Statement	Precautionary Statements	
Acute Toxicity - Oral	Category 3	H301	P264, P270, P301+P310, P321, P330, P405, P501	
Skin Corrosion / Irritation	Category 1B	H314	P260, P264, P280, P301+P330+P331,	
			P303+P361+P353, P363, P304+P340, P310,	
			P321, P305+P351+P338, P405, P501	
Specific Target Organs/Systemic Toxicity Following Repeated	Category 2	H373	P260, P314, P501	
Exposure				
Corrosive to Metals	Category 1	H290	P234, P390, P406	

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# RICCA CHEMICAL COMPANY®

## **Safety Data Sheet**

### 2.2. GHS Label Elements

#### Pictograms:







Signal Word: Danger

#### **Hazard Statements:**

Hazard Number	Hazard Statement
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H373	May cause damage to organs through prolonged or repeated exposure.

#### **Precautionary Statements:**

Precautionary Number	Precautionary Statement	
P234	Keep only in original container.	
P260	Do not breathe dust, fumes or mist.	
P264	Wash arms, hands and face thoroughly after handling.	
P270	Do not eat, drink or smoke when using this product.	
P280	Wear protective gloves and eye protection.	
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or physician.	
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.	
P314	Get medical attention if you feel unwell.	
P321	Specific treatment (Wash areas of contact with water immediately).	
P330	Rinse mouth.	
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

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#### 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%
Uranyl Acetate Dihydrate	$UO_2(CH_3COO)_2 \cdot 2H_2O$	Data not available.	6159-44-0	1.78%
Nitric Acid	HNO₃	63.01 g/mol	7697-37-2	5.00%
Water	H₂O	18.01 g/mol	7732-18-5	93.22%

## **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:** 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

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.

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### 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.

## **SECTION 8: Exposure Controls / Personal Protection**

#### 8.1. Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Nitric Acid (7697-37-2)	TWA	USA	2 ppm TWA	U.S OSHA - Final PELs - Time Weighted
			5 mg/m³ TWA	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)
Uranyl Acetate Dihydrate	TWA	USA	0.05 mg/m³ TWA (as U)	U.S OSHA - Final PELs - Time Weighted
(6159-44-0)				Averages (TWAs)
Uranyl Acetate Dihydrate	TWA	USA	0.25 mg/m <sup>3</sup> TWA (as U)	U.S OSHA - Final PELs - Time Weighted
(6159-44-0)				Averages (TWAs)
Uranyl Acetate Dihydrate	TLV-STEL	USA	0.6 mg/m³ STEL (as U)	ACGIH - Threshold Limit Values - Short
(6159-44-0)				Term Exposure Limits (TLV-STEL)
Uranyl Acetate Dihydrate	TLV-TWA	USA	0.2 mg/m³ TWA (as U)	ACGIH - Threshold Limit Values - Time
(6159-44-0)				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

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.

Solubility: Data not available.

Partition Coefficient (n-Octanol/Water): Data not available.

Auto-Ignition Temperature: Data not available.

Relative Density: 1.00

**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:**

Toxic if swallowed. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water immediately). Rinse mouth. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

#### **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 dust, fumes or mist. 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:**

May cause damage to organs through prolonged or repeated exposure. Do not breathe dust, fumes or mist. Get medical attention if you feel unwell. Dispose of contents in accordance with local, state, federal and international regulations.

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#### **Aspiration Hazard:**

Not applicable.

#### **Additional Toxicology Information:**

Data not available.

## **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)

**Sizes:** 100 mL, 250 mL, 500 mL

UN Number: UN2922

Proper Shipping Name: Corrosive liquids, toxic, n.o.s. (Nitric Acid, bis(acetato-O)dioxouranium, dihydrate)

Hazard Class: 8 (6.1)

Packing Group: ||

**Hazard Placard Labels:** 





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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, 250 mL, 500 mL

UN Number: UN2922

**Proper Shipping Name:** Corrosive liquid, toxic, n.o.s. (Nitric Acid, bis(acetato-O)dioxouranium, dihydrate

Hazard Class: 8 (6.1)

Packing Group: ||

**Hazard Placard Labels:** 





## **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

Uranyl Acetate Dihydrate (CAS # 6159-44-0): 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)

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

#### 15.5. Massachusetts Right-to-Know Substance List

Uranyl Acetate Dihydrate (CAS # 6159-44-0): Present Nitric Acid (CAS # 7697-37-2): Extraordinarily hazardous

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#### 15.6. Pennsylvania Right-to-Know Hazardous Substances

Uranyl Acetate Dihydrate (CAS # 6159-44-0): Environmental hazard

Uranyl Acetate Dihydrate (CAS # 6159-44-0): Present

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

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

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

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

Uranyl Acetate Dihydrate (CAS # 6159-44-0): sn 1975

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)

#### 15.8. California Proposition 65

Not listed.

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

Uranyl Acetate Dihydrate (CAS # 6159-44-0): Present (DSL)

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

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

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

Uranyl Acetate Dihydrate (CAS # 6159-44-0): Present

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

Water (CAS # 7732-18-5): 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. Toxic if swallowed. Causes severe skin burns and eye damage. May cause damage to organs through prolonged or repeated exposure.

Keep only in original container. Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves and eye protection.

IF SWALLOWED: Immediately call a POISON CENTER or physician. 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. Get medical attention if you feel unwell. 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.

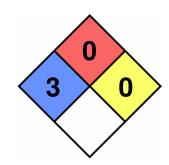
Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.

Health Hazards Not Otherwise Classified (HHNOC): Not Applicable.

Biohazardous Infectious Materials Hazard Class: Not Applicable.

#### 16.3. National Fire Protection Association (NFPA) Rating

Health: 3
Flammability: 0
Reactivity: 0
Special Hazard:



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#### 16.4. Document Revision

Last Revision Date: 9/7/2016

### **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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