



Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation VeriSpec[®] Mixed Anion Standard 7
2 ppm F⁻, 10 ppm PO₄³⁻, NO₃⁻, Br⁻, SO₄²⁻, 5ppm Cl⁻, NO₂⁻
Product Number RV010738
Other Identifying Product Numbers RV010738-100N

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 412 West Fork Drive

Arlington, TX 76012 USA

Telephone 888-467-4222

1.4. Emergency Telephone Number (24 hours)

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

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SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture

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.

2.3. Hazards not Otherwise Classified

No other hazards identified.

2.4. Ingredients of Unknown Acute Toxicity

This product does not contain any ingredients of unknown acute toxicity.

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SECTION 3: Composition / Information on Ingredients

3.1. Components of Mixture

Chemical Name (IUPAC)	Common Name and Synonyms	CAS Number	Weight%
water	Water	7732-18-5	1.00
azanium dihydrogen phosphate	Ammonium Dihydrogen Phosphate; Ammonium Phosphate Monobasic	7722-76-1	< 0.1
potassium bromide	Potassium Bromide	7758-02-3	< 0.1
diazanium sulfate	Ammonium Sulfate	7783-20-2	< 0.1
sodium nitrate	Sodium Nitrate; Nitric acid sodium salt (1:1)	7631-99-4	< 0.1
sodium nitrite	Sodium Nitrite; Nitrous acid, sodium salt (1:1)	7632-00-0	< 0.1
sodium chloride	Sodium Chloride; Salt	7647-14-5	< 0.1
sodium fluoride	Sodium Fluoride	7681-49-4	< 0.1

SECTION 4: First-Aid Measures

4.1. Description of Necessary Measures

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

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

4.2. Most Important Symptoms and Effects, Acute and Delayed

May cause mild irritation to areas of contact.

4.3. Immediate 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 in a Fire

Not considered to be a fire or explosion hazard.

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5.3. Special Protective Equipment and Precautions 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

8.1. Exposure Limits



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U.S. OSHA - Permissible Exposure Limits (PEL) - Time Weighted Averages (TWA)

Chemical Name	CAS Number	Exposure Limit
Sodium Fluoride	7681-49-4	"2.5 mg/m3 TWA (as F)" As Fluorides [RR-02792-9]

U.S. OSHA - Permissible Exposure Limits (PEL) - Ceiling Limits

No limits found.

U.S. OSHA - Permissible Exposure Limits (PEL) - Short Term Exposure Limits (STEL)

No limits found.

U.S. OSHA - Specifically Regulated Chemicals

No limits found.

ACGIH - Threshold Limit Values - Ceilings (TLV-C)

No limits found.

ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)

No limits found.

ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)

Chemical Name	CAS Number	Exposure Limit
Sodium Fluoride	7681-49-4	"2.5 mg/m3 TWA (as F)" As Fluorides [RR-02792-9]

8.2. Engineering Controls

No specific controls are needed.

8.3. Individual Protective Measures and Personal Protective Equipment

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

Skin Protection: As a general rule, wear protective gloves.

Eye Protection: As a general rule, wear safety glasses.

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SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Physical State:	Liquid
Color:	Data not available.
Odor:	Data not available.
Odor Threshold:	Data not available.
Melting/Freezing Point:	Data not available.
Boiling Point/Range:	Data not available.
Flammability:	Data not available.
Flammability/Explosive Limits:	Data not available.
Flash Point:	Not flammable
Auto-Ignition Temperature:	Data not available.
Decomposition Temperature:	Data not available.
pH:	Data not available.
Kinematic Viscosity:	Data not available.
Solubility:	Data not available.
Vapor Pressure:	Data not available.
Evaporation Rate:	Data not available.
Relative Density:	1.07
Relative Vapor Density:	Data not available.
Particle Characteristics:	Data not available.
Partition Coefficient n-octanol/water, log	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

None identified.

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SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Not acutely toxic.

Chemical Name	CAS Number	Toxicity
Sodium Nitrite	7632-00-0	Oral LD50 Acute Toxicity Estimate 100 mg/kg (Source: ECHA)
Sodium Chloride	7647-14-5	Oral LD50 Rat 3550 mg/kg (Source: ECHA)
Sodium Fluoride	7681-49-4	Oral LD50 Rat 52 mg/kg (Source: NLM_CIP)
Ammonium Dihydrogen Phosphate	7722-76-1	Oral LD50 Rat >2000 mg/kg (no deaths occurred, Source: ECHA)
Potassium Bromide	7758-02-3	Oral LD50 Rat 3070 mg/kg (Source: NLM_CIP)
Ammonium Sulfate	7783-20-2	Oral LD50 Rat 2840 mg/kg (Source: NLM_CIP)

Acute Toxicity - Dermal Exposure:

Not acutely toxic.

Chemical Name	CAS Number	Toxicity
Sodium Chloride	7647-14-5	Dermal LD50 Rabbit >10000 mg/kg (no deaths occurred, Source: ECHA)
Sodium Fluoride	7681-49-4	Dermal LD50 Rabbit >2000 mg/kg (Source: Canada_WHMIS)
Ammonium Dihydrogen Phosphate	7722-76-1	Dermal LD50 Rabbit >7940 mg/kg (Source: NLM_CIP)
Ammonium Sulfate	7783-20-2	Dermal LD50 Rat >2000 mg/kg (Source: NLM_HSDB)

Acute Toxicity - Inhalation Exposure:

Not acutely toxic.

Chemical Name	CAS Number	Toxicity
Sodium Nitrite	7632-00-0	Inhalation LC50 Rat 5.5 mg/L 4 h (Source: NLM_CIP)
Sodium Chloride	7647-14-5	Inhalation LC50 Rat >42 mg/L 1 h (no deaths occurred, aerosol, Source: ECHA_API)
Sodium Fluoride	7681-49-4	Inhalation LC50 Rat 1 mg/L 4 h (Source: Canada_WHMIS)

11.2 Carcinogenicity:

International Agency for Research on Cancer (IARC)

Chemical Name	CAS Number	Classification
Sodium Fluoride	7681-49-4	Group 3 (Not Classified) - Supplement 7 [1987] (listed under Fluorides inorganic used in drinking-water)

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National Toxicology Program (NTP)

Chemical Name	CAS Number	Classification
Sodium Nitrite	7632-00-0	Male Rat - No Evidence; Female Rat - No Evidence; Male Mice - No Evidence; Female Mice - Equivocal Evidence (TR-495)
Sodium Fluoride	7681-49-4	Male Rat - Equivocal Evidence; Female Rat - No Evidence; Male Mice - No Evidence; Female Mice - No Evidence (TR-393)

U.S. OSHA specifically regulated carcinogens

Chemical Name	CAS Number	Classification
No data found.		

11.3 Additional Toxicology Information:

Data not available.

SECTION 12: Ecological Information

12.1. Ecotoxicity

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Chemical Name	CAS Number	Species	Exposure	Toxicity
Sodium Chloride	7647-14-5	Earthworm	Acute	LC50 48 h Eisenia foetida 0.1 - 1 mg/cm2 [filter paper] (IUCLID)
Potassium Bromide	7758-02-3	Earthworm	Acute	LC50 14 Days Earthworm 162 mg/kg [soil] (NZ_CCID)
Sodium Fluoride	7681-49-4	Freshwater Algae	Acute	EC50 96 h Pseudokirchneriella subcapitata 272 mg/L (IUCLID); EC50 72 h Desmodesmus subspicatus 850 mg/L [static] (EPA)
Sodium Nitrate	7631-99-4	Freshwater Fish	Acute	LC50 96 h Lepomis macrochirus 2000 mg/L [static] (EPA); LC50 96 h Oncorhynchus mykiss 994.4 - 1107 mg/L [static] (EPA)
Sodium Nitrite	7632-00-0	Freshwater Fish	Acute	LC50 96 h Oncorhynchus mykiss 0.19 mg/L [flow-through] (juvenile, EPA); LC50 96 h Oncorhynchus mykiss 0.092 - 0.13 mg/L [flow-through] (EPA); LC50 96 h Oncorhynchus mykiss 0.4 - 0.6 mg/L [semi-static] (EPA); LC50 96 h Oncorhynchus mykiss 0.65 - 1 mg/L [static] (EPA); LC50 96 h Pimephales promelas 2.3 mg/L [flow-through] (EPA); LC50 96 h Pimephales promelas 20 mg/L [static] (EPA)
Sodium Chloride	7647-14-5	Freshwater Fish	Acute	LC50 96 h Lepomis macrochirus 5560 - 6080 mg/L [flow-through] (EPA); LC50 96 h Lepomis macrochirus 12946 mg/L [static] (EPA); LC50 96 h Pimephales promelas 6020 - 7070 mg/L [static] (EPA); LC50 96 h Pimephales promelas 7050 mg/L [semi-static] (EPA); LC50 96 h Pimephales promelas 6420 - 6700 mg/L [static] (EPA); LC50 96 h Oncorhynchus mykiss 4747 - 7824 mg/L [flow-through] (EPA)
Sodium Fluoride	7681-49-4	Freshwater Fish	Acute	LC50 96 h Lepomis macrochirus >530 mg/L (IUCLID); LC50 96 h Lepomis macrochirus 830 mg/L [semi-static] (EPA); LC50 96 h Oncorhynchus mykiss 38 - 68 mg/L [static] (EPA); LC50 96 h Pimephales promelas 180 mg/L [semi-static] (EPA)
Ammonium Dihydrogen Phosphate	7722-76-1	Freshwater Fish	Acute	LC50 96 h Oncorhynchus mykiss >85.9 mg/L [static] (ECHA)
Potassium Bromide	7758-02-3	Freshwater Fish	Acute	LC50 96 h Pimephales promelas >30 mg/L [static]

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Ammonium Sulfate	7783-20-2	Freshwater Fish	Acute	LC50 96 h Brachydanio rerio 250 mg/L (IUCLID); LC50 96 h Brachydanio rerio 480 mg/L [flow-through] (IUCLID); LC50 96 h Brachydanio rerio 420 mg/L [semi-static] (IUCLID); LC50 96 h Cyprinus carpio 18 mg/L (IUCLID); LC50 96 h Oncorhynchus mykiss 32.2 - 41.9 mg/L [flow-through] (EPA); LC50 96 h Oncorhynchus mykiss 5.2 - 8.2 mg/L [static] (EPA); LC50 96 h Pimephales promelas >100 mg/L (IUCLID); LC50 96 h Poecilia reticulata 123 - 128 mg/L [semi-static] (EPA); LC50 96 h Poecilia reticulata 126 mg/L (IUCLID)
Sodium Chloride	7647-14-5	Water Flea	Acute	EC50 48 h Daphnia magna 1000 mg/L (IUCLID); EC50 48 h Daphnia magna 340.7 - 469.2 mg/L [Static] (EPA)
Sodium Fluoride	7681-49-4	Water Flea	Acute	EC50 48 h Daphnia magna 338 mg/L (IUCLID); EC50 48 h Daphnia magna 98 mg/L [Static] (EPA)
Ammonium Sulfate	7783-20-2	Water Flea	Acute	LC50 48 h Daphnia magna 14 mg/L (IUCLID)

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.

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SECTION 14: Transportation Information

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

Not regulated according to DOT regulations.

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

Not regulated according to IATA Dangerous Goods Regulations.

14.3 Transportation of Dangerous Goods (TDG, Canada)

Not regulated according to TDG regulations.

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SECTION 15: Regulatory Information

15.01. Occupational Safety and Health Administration (OSHA) Hazards

Chemical Name	CAS Number	Regulatory Information
No data found.		

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

Chemical Name	CAS Number	RQ
No data found.		

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

Chemical Name	CAS Number	Regulatory Information
Sodium Nitrite	7632-00-0	100 lb final RQ; 45.4 kg final RQ
Sodium Fluoride	7681-49-4	1000 lb final RQ; 454 kg final RQ

15.04. Superfund Amendments and Reauthorization Act (SARA) 313 Toxics Release Inventory (TRI)

Chemical Name	CAS Number	List	Regulatory Information
Sodium Nitrate	7631-99-4	Emission Reporting	"1.0 % de minimis concentration (reportable only when in aqueous solution, listed under Chemical Category N511)" As Nitrate compounds, water dissociable [RR-03804-0]
Sodium Nitrite	7632-00-0	Emission Reporting	1.0 % de minimis concentration
Ammonium Dihydrogen Phosphate	7722-76-1	Emission Reporting	"1.0 % de minimis concentration (10% of total aqueous Ammonia is reportable under this listing)" As Aqueous ammonia from water dissociable ammonium salts and other sources [RR-47925-4]
Ammonium Sulfate	7783-20-2	Emission Reporting	"1.0 % de minimis concentration (10% of total aqueous Ammonia is reportable under this listing)" As Aqueous ammonia from water dissociable ammonium salts and other sources [RR-47925-4]

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15.05. Massachusetts Right-to-Know Substance List

Chemical Name	CAS Number	Regulatory Information
Sodium Nitrate	7631-99-4	Present
Sodium Nitrite	7632-00-0	Present
Sodium Fluoride	7681-49-4	Present
Ammonium Sulfate	7783-20-2	Present

15.06. Pennsylvania Right-to-Know Hazardous Substances

Chemical Name	CAS Number	Regulatory Information
Sodium Nitrate	7631-99-4	Present
Sodium Nitrite	7632-00-0	Environmental hazard
Sodium Fluoride	7681-49-4	Environmental hazard
Ammonium Sulfate	7783-20-2	Environmental hazard

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

Chemical Name	CAS Number	Regulatory Information
Sodium Nitrate	7631-99-4	"sn 3722" As Nitrate compounds [RR-01770-9]
Sodium Nitrite	7632-00-0	sn 2258
Sodium Fluoride	7681-49-4	sn 1699

15.08. California Proposition 65

Chemical Name	CAS Number	Regulatory Information
No data found.		

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

Chemical Name	CAS Number	List	Status
Sodium Nitrate	7631-99-4	DSL	Present
Sodium Nitrite	7632-00-0	DSL	Present
Sodium Chloride	7647-14-5	DSL	Present
Sodium Fluoride	7681-49-4	DSL	Present
Ammonium Dihydrogen Phosphate	7722-76-1	DSL	Present
Water	7732-18-5	DSL	Present
Potassium Bromide	7758-02-3	DSL	Present
Ammonium Sulfate	7783-20-2	DSL	Present

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

Chemical Name	CAS Number	Status
Sodium Nitrate	7631-99-4	Present (ACTIVE)
Sodium Nitrite	7632-00-0	Present [S] (ACTIVE)
Sodium Chloride	7647-14-5	Present (ACTIVE)
Sodium Fluoride	7681-49-4	Present (ACTIVE)
Ammonium Dihydrogen Phosphate	7722-76-1	Present (ACTIVE)
Water	7732-18-5	Present [XU] (ACTIVE)
Potassium Bromide	7758-02-3	Present (ACTIVE)
Ammonium Sulfate	7783-20-2	Present (ACTIVE)

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

Chemical Name	CAS Number	List	Number
Sodium Nitrate	7631-99-4	EINECS	231-554-3
Sodium Nitrite	7632-00-0	EINECS	231-555-9
Sodium Chloride	7647-14-5	EINECS	231-598-3
Sodium Fluoride	7681-49-4	EINECS	231-667-8
Ammonium Dihydrogen Phosphate	7722-76-1	EINECS	231-764-5
Water	7732-18-5	EINECS	231-791-2
Potassium Bromide	7758-02-3	EINECS	231-830-3
Ammonium Sulfate	7783-20-2	EINECS	231-984-1

15.12. China - Inventory of Existing chemical Substances (IECSC)

Chemical Name	CAS Number	Status
Sodium Nitrate	7631-99-4	Present [35612]
Sodium Nitrite	7632-00-0	Present [36929]
Sodium Chloride	7647-14-5	Present [24102]
Sodium Fluoride	7681-49-4	Present [13200]
Ammonium Dihydrogen Phosphate	7722-76-1	Present [22403]
Water	7732-18-5	Present [32224]
Potassium Bromide	7758-02-3	Present [36153]
Ammonium Sulfate	7783-20-2	Present [23019]

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15.13. Korea - Existing Chemicals Inventory (KECI/KECL)

Chemical Name	CAS Number	List	Status
Sodium Nitrate	7631-99-4	Annex 1	Present [KE-31545]
Sodium Nitrite	7632-00-0	Annex 1	Present [KE-31546]
Sodium Nitrite	7632-00-0	Annex 3	"Present (97-1-167)" As Nitrous acid, salts [RR-04206-8]
Sodium Chloride	7647-14-5	Annex 1	Present [KE-31387]
Sodium Fluoride	7681-49-4	Annex 1	Present [KE-31540]
Ammonium Dihydrogen Phosphate	7722-76-1	Annex 1	Present [KE-01656]
Water	7732-18-5	Annex 1	Present [KE-35400]
Potassium Bromide	7758-02-3	Annex 1	Present [KE-29079]
Ammonium Sulfate	7783-20-2	Annex 1	Present [KE-01743]

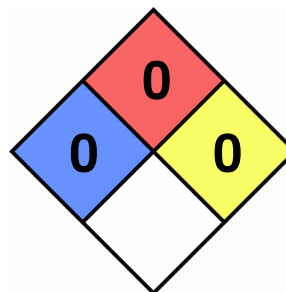
15.14. Japan - Existing and New Chemical Substances Inventory (ENCS)

Chemical Name	CAS Number	MITI No.
Sodium Nitrate	7631-99-4	(1)-484
Sodium Nitrite	7632-00-0	(1)-483
Sodium Chloride	7647-14-5	(1)-236
Sodium Fluoride	7681-49-4	(1)-332
Ammonium Dihydrogen Phosphate	7722-76-1	(1)-379
Water	7732-18-5	- (listed on Japanese Pharmacopoeia 8th Edition)
Potassium Bromide	7758-02-3	(1)-108
Ammonium Sulfate	7783-20-2	(1)-400

SECTION 16: Other Information

16.1 National Fire Protection Associate (NFPA) Rating

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





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16.2 Document Revision

Last Revision Date:

2026-05-06

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.