

## Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS)

### SECTION 1: Identification

#### 1.1. Product Identifier

**Trade Name or Designation:** ICP-MS Interference Check Standard 1

**Product Number:** RMSIFCK1

**Other Identifying Product Numbers:** RMSIFCK1-100

#### 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

#### 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 hours)

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

### SECTION 2: Hazard(s) Identification

#### 2.1. Classification of the Substance or Mixture

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

Hazard Class	Category	Hazard Statements:	Precautionary Statements:
Skin Corrosion / Irritation	Category 1	H314	P260, P264, P280, P301+P330+P331, P303+P361+P353, P363, P304+P340, P310, P321, P305+P351+P338, P405, P501
Eye Damage / Irritation	Category 1	H318	P280, P305+P351+P338, P310
Corrosive to Metals	Category 1	H290	P234, P390, P406

# Safety Data Sheet

## 2.2. GHS Label Elements

Pictograms:



Signal Word: **Danger**

Hazard Statements:

Hazard Number	Hazard Statement
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

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.
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.).
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.

## 2.4. 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	H <sub>2</sub> O	18.01 g/mol	7732-18-5	90.67
Nitric Acid	HNO <sub>3</sub>	63.01 g/mol	7697-37-2	4.89
Aluminum Nitrate Nonahydrate	Al(NO <sub>3</sub> ) <sub>3</sub> ·9H <sub>2</sub> O	375.13 g/mol	7784-27-2	1.35
Hydrochloric Acid	HCl	36.46 g/mol	7647-01-0	0.99
Acetic Acid	CH <sub>3</sub> COOH	60.05 g/mol	64-19-7	0.49
Ammonium Sulfate	(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	132.13 g/mol	7783-20-2	0.40
Ammonium Dihydrogen Phosphate	NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub>	97.99 g/mol	7722-76-1	0.36
Calcium Carbonate	CaCO <sub>3</sub>	100.09 g/mol	471-34-1	0.24
Sodium Carbonate	Na <sub>2</sub> CO <sub>3</sub>	105.98 g/mol	497-19-8	0.22
Potassium Carbonate	K <sub>2</sub> CO <sub>3</sub>	138.20 g/mol	584-08-7	0.17
Magnesium	Mg	24.30 g/mol	7439-95-4	0.10
Iron	Fe	55.84 g/mol	7439-89-6	0.10
Ammonium Hexafluorotitanate	(NH <sub>4</sub> ) <sub>2</sub> TiF <sub>6</sub>	197.93 g/mol	16962-40-6	< 0.1
Ammonium Molybdate	(NH <sub>4</sub> ) <sub>2</sub> MoO <sub>4</sub>	196.03 g/mol	13106-76-8	< 0.1
Ammonium Hydroxide	NH <sub>4</sub> OH	35.04 g/mol	1336-21-6	< 0.1
Hydrofluoric Acid	HF	20.00 g/mol	7664-39-3	< 0.1

## 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. May cause irritation, redness, pain, and tearing.

**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. May cause irritation, redness and pain. Contact will discolor skin yellow-brown depending on exposure which will wear off after a period of time.

**Ingestion:** IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Dilute with water or milk. Do not induce vomiting. Call a physician if necessary.

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### 4.2. Most Important Symptoms and Effects, Acute and Delayed

Causes severe skin burns and eye damage. Causes serious eye damage. Corrosive Liquid. Avoid contact with skin, eyes, and clothing. Avoid breathing vapor. If swallowed, do not induce vomiting. Dilute with water and call a physician. Wash areas of contact with plenty of water. EYE CONTACT: May cause irritation, redness, pain, and tearing. SKIN CONTACT: May cause irritation, redness and pain. Contact will discolor skin yellow-brown depending on exposure which will wear off after a period of time.

### 4.3. Medical Attention or Special Treatment Needed

Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water.). Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops. Dilute with water or milk. Do not induce vomiting. Call physician if necessary.

## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.

### 5.2. Specific Hazards Arising from the Substance or Mixture

Not combustible, but substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. Can react with metals to release flammable hydrogen gas.

### 5.3. Special Protective Equipment for Firefighters

Use protective clothing and 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

Cover the spill with Sodium Carbonate or a soda ash-slaked lime mixture (50:50). Mix and add water to form slurry. Decant the liquid to the drain with excess water. Treat the solid residue as normal refuse. Wash site with soda ash solution. Always 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. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.

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## SECTION 8: Exposure Controls / Personal Protection

### 8.1 Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Ammonium Molybdate (13106-76-8)	TWA	USA	"5 mg/m <sup>3</sup> TWA (as Mo)" As Molybdenum, soluble compounds [RR-00036-2]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Ammonium Molybdate (13106-76-8)	TLV-TWA	USA	"0.5 mg/m <sup>3</sup> TWA (respirable particulate matter, as Mo)" As Molybdenum soluble compounds [RR-00036-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Ammonium Molybdate (13106-76-8)	TWA	USA	5 mg/m <sup>3</sup> TWA (as Mo)	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Ammonium Molybdate (13106-76-8)	TLV-TWA	USA	0.5 mg/m <sup>3</sup> TWA (respirable particulate matter, as Mo)	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Ammonium Hydroxide (1336-21-6)	TLV-STEL	USA	"35 ppm STEL" As Ammonia [7664-41-7]	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)
Ammonium Hydroxide (1336-21-6)	TWA	USA	"50 ppm TWA; 35 mg/m <sup>3</sup> TWA" As Ammonia [7664-41-7]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Ammonium Hydroxide (1336-21-6)	TLV-TWA	USA	"25 ppm TWA" As Ammonia [7664-41-7]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Ammonium Hydroxide (1336-21-6)	TLV-STEL	USA	35 ppm STEL	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)
Ammonium Hydroxide (1336-21-6)	TLV-TWA	USA	25 ppm TWA	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Ammonium Hydroxide (1336-21-6)	TWA	USA	50 ppm TWA; 35 mg/m <sup>3</sup> TWA	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Ammonium Hexafluorotitanate (16962- TWA		USA	"2.5 mg/m <sup>3</sup> TWA (as F)" As Fluorides [RR-02792-9]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Ammonium Hexafluorotitanate (16962- TLV-TWA		USA	"2.5 mg/m <sup>3</sup> TWA (as F)" As Fluorides [RR-02792-9]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Ammonium Hexafluorotitanate (16962- TWA		USA	2.5 mg/m <sup>3</sup> TWA (as F)	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Ammonium Hexafluorotitanate (16962- TLV-TWA		USA	2.5 mg/m <sup>3</sup> TWA (as F)	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)

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Calcium Carbonate (471-34-1)	TWA	USA	"15 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable fraction)" As Calcium carbonate [1317-65-3]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Acetic Acid (64-19-7)	TLV-STEL	USA	"15 ppm STEL" As Acetic acid [64-19-7]	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)
Acetic Acid (64-19-7)	TLV-TWA	USA	"10 ppm TWA" As Acetic acid [64-19-7]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Acetic Acid (64-19-7)	TWA	USA	"10 ppm TWA; 25 mg/m <sup>3</sup> TWA" As Acetic acid [64-19-7]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Acetic Acid (64-19-7)	TWA	USA	10 ppm TWA; 25 mg/m <sup>3</sup> TWA	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Acetic Acid (64-19-7)	TLV-TWA	USA	10 ppm TWA	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Acetic Acid (64-19-7)	TLV-STEL	USA	15 ppm STEL	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)
Acetic Acid (64-19-7)	TLV-TWA	USA	"10 ppm TWA" As Acetic acid [64-19-7]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Acetic Acid (64-19-7)	TLV-STEL	USA	"15 ppm STEL" As Acetic acid [64-19-7]	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)
Acetic Acid (64-19-7)	TWA	USA	"10 ppm TWA; 25 mg/m <sup>3</sup> TWA" As Acetic acid [64-19-7]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Acetic Acid (64-19-7)	TLV-TWA	USA	"10 ppm TWA" As Acetic acid [64-19-7]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Acetic Acid (64-19-7)	TWA	USA	"10 ppm TWA; 25 mg/m <sup>3</sup> TWA" As Acetic acid [64-19-7]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Acetic Acid (64-19-7)	TLV-STEL	USA	"15 ppm STEL" As Acetic acid [64-19-7]	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)
Hydrochloric Acid (7647-01-0)	PEL-Ceiling	USA	"5 ppm Ceiling; 7 mg/m <sup>3</sup> Ceiling" As Hydrogen chloride [7647-01-0]	U.S. - OSHA - Final PELs - Ceiling Limits
Hydrochloric Acid (7647-01-0)	TLV-Ceiling	USA	"2 ppm Ceiling" As Hydrogen chloride [7647-01-0]	ACGIH - Threshold Limit Values - Ceilings (TLV-C)
Hydrochloric Acid (7647-01-0)	TLV-Ceiling	USA	"2 ppm Ceiling" As Hydrogen chloride [7647-01-0]	ACGIH - Threshold Limit Values - Ceilings (TLV-C)

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Hydrochloric Acid (7647-01-0)	PEL-Ceiling	USA	"5 ppm Ceiling; 7 mg/m <sup>3</sup> Ceiling" As Hydrogen chloride [7647-01-0]	U.S. - OSHA - Final PELs - Ceiling Limits
Hydrochloric Acid (7647-01-0)	TLV-Ceiling	USA	"2 ppm Ceiling" As Hydrogen chloride [7647-01-0]	ACGIH - Threshold Limit Values - Ceilings (TLV-C)
Hydrochloric Acid (7647-01-0)	PEL-Ceiling	USA	"5 ppm Ceiling; 7 mg/m <sup>3</sup> Ceiling" As Hydrogen chloride [7647-01-0]	U.S. - OSHA - Final PELs - Ceiling Limits
Hydrochloric Acid (7647-01-0)	TLV-Ceiling	USA	"2 ppm Ceiling" As Hydrogen chloride [7647-01-0]	ACGIH - Threshold Limit Values - Ceilings (TLV-C)
Hydrochloric Acid (7647-01-0)	PEL-Ceiling	USA	"5 ppm Ceiling; 7 mg/m <sup>3</sup> Ceiling" As Hydrogen chloride [7647-01-0]	U.S. - OSHA - Final PELs - Ceiling Limits
Hydrochloric Acid (7647-01-0)	TLV-Ceiling	USA	2 ppm Ceiling	ACGIH - Threshold Limit Values - Ceilings (TLV-C)
Hydrochloric Acid (7647-01-0)	PEL-Ceiling	USA	5 ppm Ceiling; 7 mg/m <sup>3</sup> Ceiling	U.S. - OSHA - Final PELs - Ceiling Limits
Hydrochloric Acid (7647-01-0)	TLV-Ceiling	USA	"2 ppm Ceiling" As Hydrogen chloride [7647-01-0]	ACGIH - Threshold Limit Values - Ceilings (TLV-C)
Hydrochloric Acid (7647-01-0)	PEL-Ceiling	USA	"5 ppm Ceiling; 7 mg/m <sup>3</sup> Ceiling" As Hydrogen chloride [7647-01-0]	U.S. - OSHA - Final PELs - Ceiling Limits
Hydrochloric Acid (7647-01-0)	TLV-Ceiling	USA	"2 ppm Ceiling" As Hydrogen chloride [7647-01-0]	ACGIH - Threshold Limit Values - Ceilings (TLV-C)
Hydrochloric Acid (7647-01-0)	PEL-Ceiling	USA	"5 ppm Ceiling; 7 mg/m <sup>3</sup> Ceiling" As Hydrogen chloride [7647-01-0]	U.S. - OSHA - Final PELs - Ceiling Limits
Hydrochloric Acid (7647-01-0)	PEL-Ceiling	USA	"5 ppm Ceiling; 7 mg/m <sup>3</sup> Ceiling" As Hydrogen chloride [7647-01-0]	U.S. - OSHA - Final PELs - Ceiling Limits
Hydrochloric Acid (7647-01-0)	TLV-Ceiling	USA	"2 ppm Ceiling" As Hydrogen chloride [7647-01-0]	ACGIH - Threshold Limit Values - Ceilings (TLV-C)



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Hydrofluoric Acid (7664-39-3)	TWA	USA	"3 ppm TWA (as F)" As Hydrogen fluoride [7664-39-3]; "2.5 mg/m³ TWA (as F)" As Fluorides [RR-02792-9]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Hydrofluoric Acid (7664-39-3)	TLV-Ceiling	USA	"2 ppm Ceiling (as F)" As Hydrogen fluoride [7664-39-3]	ACGIH - Threshold Limit Values - Ceilings (TLV-C)
Hydrofluoric Acid (7664-39-3)	TLV-TWA	USA	"0.5 ppm TWA (as F)" As Hydrogen fluoride [7664-39-3]; "2.5 mg/m³ TWA (as F)" As Fluorides [RR-02792-9]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Hydrofluoric Acid (7664-39-3)	TLV-TWA	USA	"0.5 ppm TWA (as F)" As Hydrogen fluoride [7664-39-3]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Hydrofluoric Acid (7664-39-3)	TWA	USA	"3 ppm TWA (as F)" As Hydrogen fluoride [7664-39-3]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Hydrofluoric Acid (7664-39-3)	TLV-Ceiling	USA	"2 ppm Ceiling (as F)" As Hydrogen fluoride [7664-39-3]	ACGIH - Threshold Limit Values - Ceilings (TLV-C)
Hydrofluoric Acid (7664-39-3)	TLV-TWA	USA	0.5 ppm TWA (as F)	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Hydrofluoric Acid (7664-39-3)	TLV-Ceiling	USA	2 ppm Ceiling (as F)	ACGIH - Threshold Limit Values - Ceilings (TLV-C)
Hydrofluoric Acid (7664-39-3)	TWA	USA	3 ppm TWA (as F)	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Hydrofluoric Acid (7664-39-3)	TWA	USA	2.5 mg/m³ TWA (as F)	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Hydrofluoric Acid (7664-39-3)	TLV-TWA	USA	2.5 mg/m³ TWA (as F)	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Hydrofluoric Acid (7664-39-3)	TLV-Ceiling	USA	"2 ppm Ceiling (as F)" As Hydrogen fluoride [7664-39-3]	ACGIH - Threshold Limit Values - Ceilings (TLV-C)
Hydrofluoric Acid (7664-39-3)	TLV-TWA	USA	"0.5 ppm TWA (as F)" As Hydrogen fluoride [7664-39-3]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Hydrofluoric Acid (7664-39-3)	TWA	USA	"3 ppm TWA (as F)" As Hydrogen fluoride [7664-39-3]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)



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Hydrofluoric Acid (7664-39-3)	TLV-Ceiling	USA	"2 ppm Ceiling (as F)" As Hydrogen fluoride [7664-39-3]	ACGIH - Threshold Limit Values - Ceilings (TLV-C)
Hydrofluoric Acid (7664-39-3)	TLV-TWA	USA	"0.5 ppm TWA (as F)" As Hydrogen fluoride [7664-39-3]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Hydrofluoric Acid (7664-39-3)	TWA	USA	"3 ppm TWA (as F)" As Hydrogen fluoride [7664-39-3]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Nitric Acid (7697-37-2)	TLV-STEL	USA	"4 ppm STEL" As Nitric acid [7697-37-2]	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)
Nitric Acid (7697-37-2)	TLV-TWA	USA	"2 ppm TWA" As Nitric acid [7697-37-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Nitric Acid (7697-37-2)	TWA	USA	"2 ppm TWA; 5 mg/m <sup>3</sup> TWA" As Nitric acid [7697-37-2]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Nitric Acid (7697-37-2)	TLV-TWA	USA	"2 ppm TWA" As Nitric acid [7697-37-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Nitric Acid (7697-37-2)	TWA	USA	"2 ppm TWA; 5 mg/m <sup>3</sup> TWA" As Nitric acid [7697-37-2]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Nitric Acid (7697-37-2)	TLV-STEL	USA	"4 ppm STEL" As Nitric acid [7697-37-2]	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)
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)
Nitric Acid (7697-37-2)	TWA	USA	2 ppm TWA; 5 mg/m <sup>3</sup> TWA	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Nitric Acid (7697-37-2)	TWA	USA	"2 ppm TWA; 5 mg/m <sup>3</sup> TWA" As Nitric acid [7697-37-2]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Nitric Acid (7697-37-2)	TLV-TWA	USA	"2 ppm TWA" As Nitric acid [7697-37-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Nitric Acid (7697-37-2)	TLV-STEL	USA	"4 ppm STEL" As Nitric acid [7697-37-2]	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)
Nitric Acid (7697-37-2)	TWA	USA	"2 ppm TWA; 5 mg/m <sup>3</sup> TWA" As Nitric acid [7697-37-2]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Nitric Acid (7697-37-2)	TLV-STEL	USA	"4 ppm STEL" As Nitric acid [7697-37-2]	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)

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Nitric Acid (7697-37-2)	TLV-TWA	USA	"2 ppm TWA" As Nitric acid [7697-37-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Nitric Acid (7697-37-2)	TWA	USA	"2 ppm TWA; 5 mg/m <sup>3</sup> TWA" As Nitric acid [7697-37-2]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Nitric Acid (7697-37-2)	TLV-TWA	USA	"2 ppm TWA" As Nitric acid [7697-37-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Nitric Acid (7697-37-2)	TLV-STEL	USA	"4 ppm STEL" As Nitric acid [7697-37-2]	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)
Nitric Acid (7697-37-2)	TLV-TWA	USA	"2 ppm TWA" As Nitric acid [7697-37-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Nitric Acid (7697-37-2)	TLV-STEL	USA	"4 ppm STEL" As Nitric acid [7697-37-2]	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)
Nitric Acid (7697-37-2)	TWA	USA	"2 ppm TWA; 5 mg/m <sup>3</sup> TWA" As Nitric acid [7697-37-2]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)

### 8.2. Exposure Controls

**Engineering Controls:** No specific controls are needed. Normal room ventilation is adequate.

**Respiratory Protection:** Normal room ventilation is adequate.

**Skin Protection:** Wear protective gloves and eye protection. Chemical resistant gloves.

**Eye Protection:** Wear protective gloves and eye protection. Safety glasses or goggles.

### 8.3. Personal Protective Equipment

Wear protective gloves and eye protection. Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.

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## SECTION 9: Physical and Chemical Properties

### 9.1. Basic Physical and Chemical Properties

**Appearance:** Yellow-brown liquid

**Physical State:** Liquid

**Odor:** Data not available.

**Odor Threshold:** Data not available.

**pH:** Acidic

**Melting/Freezing Point:** Approximately 0°C

**Initial Boiling Point/Range:** Approximately 100°C - Approximately 100°C

**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:** Miscible

**Partition Coefficient:** Data not available.

**Auto-Ignition Temperature:** Data not available.

**Decomposition Temperature:** Data not available.

**Viscosity:** Data not available.

**Explosive Properties:** 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. Strong bases, metallic powders, Carbides, Hydrogen Sulfide, Turpentine and combustible organics.

### 10.4. Hazardous Decomposition Products

Will not occur.

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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:**

LDLo, Oral, Human: 430 mg/kg (Nitric Acid), details of toxic effects not reported other than lethal dose value. LD50, Oral, Rat: (Aluminum Nitrate Nonahydrate) 3671 mg/kg. Toxic Effects: Behavioral - somnolence (general depressed activity), Gastrointestinal - changes in structure or function of salivary glands.

**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.). 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:**

Causes serious eye damage. Wear protective gloves and eye protection. 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.

**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.

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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

**UN Number:** UN3264

**Proper Shipping Name:** Corrosive Liquid, Acidic, Inorganic, n.o.s. (Nitric Acid)

**Hazard Class:** 8

**Packing Group:** III

**Hazard Label(s):**



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### 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:** III

**Hazard Label(s):**



### 14.3 Transportation of Dangerous Goods (TDG, Canada)

**Sizes:** 100 mL

**UN Number:** UN3264

**Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (nitric acid)

**Hazard Class:** 8

**Packing Group:** III

**Hazard Label(s):**



## SECTION 15: Regulatory Information

### 15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.



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

Ammonium Hydroxide (CAS # 1336-21-6): "100 lb EPCRA RQ" As Ammonia [7664-41-7]  
Ammonium Hydroxide (CAS # 1336-21-6): "500 lb TPQ" As Ammonia [7664-41-7]  
Ammonium Hydroxide (CAS # 1336-21-6): 100 lb EPCRA RQ  
Ammonium Hydroxide (CAS # 1336-21-6): 500 lb TPQ  
Hydrochloric Acid (CAS # 7647-01-0): "500 lb TPQ (gas only)" As Hydrogen chloride [7647-01-0]  
Hydrochloric Acid (CAS # 7647-01-0): "5000 lb EPCRA RQ (gas only)" As Hydrogen chloride [7647-01-0]  
Hydrochloric Acid (CAS # 7647-01-0): 500 lb TPQ (gas only)  
Hydrochloric Acid (CAS # 7647-01-0): 5000 lb EPCRA RQ (gas only)  
Hydrofluoric Acid (CAS # 7664-39-3): "100 lb EPCRA RQ" As Hydrogen fluoride [7664-39-3]  
Hydrofluoric Acid (CAS # 7664-39-3): "100 lb TPQ" As Hydrogen fluoride [7664-39-3]  
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" As Nitric acid [7697-37-2]  
Nitric Acid (CAS # 7697-37-2): "1000 lb TPQ" As Nitric acid [7697-37-2]  
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

Ammonium Hydroxide (CAS # 1336-21-6): "1000 lb final RQ; 454 kg final RQ" As Ammonium hydroxide [1336-21-6]  
Ammonium Hydroxide (CAS # 1336-21-6): 100 lb final RQ; 45.4 kg final RQ  
Ammonium Hydroxide (CAS # 1336-21-6): 1000 lb final RQ; 454 kg final RQ  
Acetic Acid (CAS # 64-19-7): "5000 lb final RQ; 2270 kg final RQ" As Acetic acid [64-19-7]  
Acetic Acid (CAS # 64-19-7): 5000 lb final RQ; 2270 kg final RQ  
Hydrochloric Acid (CAS # 7647-01-0): "5000 lb final RQ; 2270 kg final RQ" As Hydrochloric acid [7647-01-0]  
Hydrochloric Acid (CAS # 7647-01-0): 5000 lb final RQ; 2270 kg final RQ  
Hydrofluoric Acid (CAS # 7664-39-3): "100 lb final RQ; 45.4 kg final RQ" As Hydrofluoric acid [7664-39-3]  
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" As Nitric acid [7697-37-2]  
Nitric Acid (CAS # 7697-37-2): 1000 lb final RQ; 454 kg final RQ





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

Ammonium Molybdate (CAS # 13106-76-8): "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 Molybdate (CAS # 13106-76-8): 1.0 % de minimis concentration (10% of total aqueous Ammonia is reportable under this listing)

Ammonium Hydroxide (CAS # 1336-21-6): "1.0 % de minimis concentration (includes anhydrous Ammonia and aqueous Ammonia from water dissociable Ammonium salts and other sources, 10% of total aqueous Ammonia is reportable under this listing)" As Ammonia [7664-41-7];

"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 Hydroxide (CAS # 1336-21-6): 1.0 % de minimis concentration (10% of total aqueous Ammonia is reportable under this listing)

Ammonium Hydroxide (CAS # 1336-21-6): 1.0 % de minimis concentration (includes anhydrous Ammonia and aqueous Ammonia from water dissociable Ammonium salts and other sources, 10% of total aqueous Ammonia is reportable under this listing)

Ammonium Hexafluorotitanate (CAS # 16962-40-6): "1.0 % de minimis concentration (10% of total aqueous Ammonia is reportable under this listing)" Aqueous ammonia from water dissociable ammonium salts and other sources [RR-47925-4]

Ammonium Hexafluorotitanate (CAS # 16962-40-6): 1.0 % de minimis concentration (10% of total aqueous Ammonia is reportable under this listing)

Hydrochloric Acid (CAS # 7647-01-0): "1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)" As Hydrochloric acid [7647-01-0]

Hydrochloric Acid (CAS # 7647-01-0): 1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)

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

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

Ammonium Hydroxide (CAS # 1336-21-6): "Present" As Ammonium hydroxide [1336-21-6]

Ammonium Hydroxide (CAS # 1336-21-6): Extraordinarily hazardous (including anhydrous)

Ammonium Hydroxide (CAS # 1336-21-6): Present

Calcium Carbonate (CAS # 471-34-1): "Present (including dust)" As Calcium carbonate [1317-65-3]

Acetic Acid (CAS # 64-19-7): "Present (including glacial)" As Acetic acid [64-19-7]

Acetic Acid (CAS # 64-19-7): Present (including glacial)

Magnesium (CAS # 7439-95-4): "Present" As Magnesium [7439-95-4]

Magnesium (CAS # 7439-95-4): Present

Hydrochloric Acid (CAS # 7647-01-0): "Extraordinarily hazardous" As Hydrochloric acid [7647-01-0]

Hydrochloric Acid (CAS # 7647-01-0): Extraordinarily hazardous

Hydrofluoric Acid (CAS # 7664-39-3): "Extraordinarily hazardous" As Hydrofluoric acid [7664-39-3]

Hydrofluoric Acid (CAS # 7664-39-3): Extraordinarily hazardous

Nitric Acid (CAS # 7697-37-2): "Extraordinarily hazardous" As Nitric acid [7697-37-2]

Nitric Acid (CAS # 7697-37-2): Extraordinarily hazardous

Ammonium Sulfate (CAS # 7783-20-2): "Present" As Ammonium sulfate [7783-20-2]

Ammonium Sulfate (CAS # 7783-20-2): Present



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

Ammonium Hydroxide (CAS # 1336-21-6): "Environmental hazard" As Ammonium hydroxide ((NH<sub>4</sub>)(OH)) [1336-21-6]

Ammonium Hydroxide (CAS # 1336-21-6): "Present" As Ammonium hydroxide ((NH<sub>4</sub>)(OH)) [1336-21-6]

Ammonium Hydroxide (CAS # 1336-21-6): Environmental hazard

Ammonium Hydroxide (CAS # 1336-21-6): Present

Calcium Carbonate (CAS # 471-34-1): "Present" As Limestone [1317-65-3]

Acetic Acid (CAS # 64-19-7): "Environmental hazard; Environmental hazard (water solutions)" As Acetic acid [64-19-7]

Acetic Acid (CAS # 64-19-7): "Present (including water solutions)" As Acetic acid [64-19-7]

Acetic Acid (CAS # 64-19-7): Environmental hazard; Environmental hazard (water solutions)

Acetic Acid (CAS # 64-19-7): Present (including water solutions)

Magnesium (CAS # 7439-95-4): "Present" As Magnesium [7439-95-4]

Magnesium (CAS # 7439-95-4): Present

Hydrochloric Acid (CAS # 7647-01-0): "Environmental hazard" As Hydrochloric acid [7647-01-0]

Hydrochloric Acid (CAS # 7647-01-0): "Present" As Hydrochloric acid [7647-01-0]

Hydrochloric Acid (CAS # 7647-01-0): Environmental hazard

Hydrochloric Acid (CAS # 7647-01-0): Present

Hydrofluoric Acid (CAS # 7664-39-3): "Environmental hazard" As Hydrofluoric acid [7664-39-3]

Hydrofluoric Acid (CAS # 7664-39-3): "Present" As Hydrofluoric acid [7664-39-3]

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

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

Nitric Acid (CAS # 7697-37-2): "Environmental hazard" As Nitric acid [7697-37-2]

Nitric Acid (CAS # 7697-37-2): "Present" As Nitric acid [7697-37-2]

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

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

Water (CAS # 7732-18-5): "Present" As Ethyl alcohol and water [RR-00802-6]

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

Ammonium Sulfate (CAS # 7783-20-2): "Environmental hazard" As Sulfuric acid, diammonium salt [7783-20-2]

Ammonium Sulfate (CAS # 7783-20-2): "Present" As Sulfuric acid, diammonium salt [7783-20-2]

Ammonium Sulfate (CAS # 7783-20-2): Environmental hazard

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

Ammonium Molybdate (CAS # 13106-76-8): "sn 0105" As Ammonium molybdate [13106-76-8]

Ammonium Molybdate (CAS # 13106-76-8): sn 0105

Ammonium Hydroxide (CAS # 1336-21-6): "corrosive" As Ammonium hydroxide [1336-21-6]

Ammonium Hydroxide (CAS # 1336-21-6): "SN 0084 500 lb TPQ (The reportable quantity for anhydrous Ammonia is based on 100% of the anhydrous Ammonia. The reportable quantity for aqueous Ammonia is the Ammonia equivalent weight for concentrations of  $\geq 20\%$ .)" As Ammonia [7664-41-7]

Ammonium Hydroxide (CAS # 1336-21-6): "sn 0103" As Ammonium hydroxide [1336-21-6]

Ammonium Hydroxide (CAS # 1336-21-6): corrosive

Ammonium Hydroxide (CAS # 1336-21-6): sn 0084

Ammonium Hydroxide (CAS # 1336-21-6): SN 0084 500 lb TPQ (The reportable quantity for anhydrous Ammonia is based on 100% of the anhydrous Ammonia. The reportable quantity for aqueous Ammonia is the Ammonia equivalent weight for concentrations of  $\geq 20\%$ .)

Ammonium Hydroxide (CAS # 1336-21-6): sn 0103

Ammonium Hexafluorotitanate (CAS # 16962-40-6): "sn 0936" As Fluorides [RR-02792-9]

Ammonium Hexafluorotitanate (CAS # 16962-40-6): sn 0936

Calcium Carbonate (CAS # 471-34-1): "sn 4001" As Calcium carbonate [1317-65-3]

Acetic Acid (CAS # 64-19-7): "corrosive" As Acetic acid [64-19-7]

Acetic Acid (CAS # 64-19-7): "sn 0004" As Acetic acid [64-19-7]

Acetic Acid (CAS # 64-19-7): corrosive

Acetic Acid (CAS # 64-19-7): sn 0004

Magnesium (CAS # 7439-95-4): "sn 1136" As Magnesium [7439-95-4]

Magnesium (CAS # 7439-95-4): sn 1136

Hydrochloric Acid (CAS # 7647-01-0): "corrosive" As Hydrogen chloride [7647-01-0]

Hydrochloric Acid (CAS # 7647-01-0): "SN 1012 500 lb TPQ; SN 2909 500 lb TPQ (gas only)" As Hydrogen chloride [7647-01-0]

Hydrochloric Acid (CAS # 7647-01-0): "sn 1012" As Hydrogen chloride [7647-01-0]

Hydrochloric Acid (CAS # 7647-01-0): corrosive

Hydrochloric Acid (CAS # 7647-01-0): sn 1012

Hydrochloric Acid (CAS # 7647-01-0): SN 1012 500 lb TPQ; SN 2909 500 lb TPQ (gas only)

Hydrofluoric Acid (CAS # 7664-39-3): "cor"

### 15.8. California Proposition 65

Not listed.

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

Ammonium Molybdate (CAS # 13106-76-8): "Present" As Ammonium molybdate [13106-76-8] (DSL)  
 Ammonium Molybdate (CAS # 13106-76-8): Present (DSL)  
 Ammonium Hydroxide (CAS # 1336-21-6): "Present" As Ammonium hydroxide [1336-21-6] (DSL)  
 Ammonium Hydroxide (CAS # 1336-21-6): Present (DSL)  
 Ammonium Hexafluorotitanate (CAS # 16962-40-6): Present (NDSL)  
 Calcium Carbonate (CAS # 471-34-1): "Present" As Calcium carbonate [1317-65-3] (NDSL)  
 Calcium Carbonate (CAS # 471-34-1): "Present" As Carbonic acid, calcium salt (1:1) [471-34-1] (DSL)  
 Calcium Carbonate (CAS # 471-34-1): Present (DSL)  
 Sodium Carbonate (CAS # 497-19-8): "Present" As Sodium carbonate [497-19-8] (DSL)  
 Sodium Carbonate (CAS # 497-19-8): Present (DSL)  
 Potassium Carbonate (CAS # 584-08-7): "Present" As Potassium carbonate [584-08-7] (DSL)  
 Potassium Carbonate (CAS # 584-08-7): Present (DSL)  
 Acetic Acid (CAS # 64-19-7): "Present" As Acetic acid [64-19-7] (DSL)  
 Acetic Acid (CAS # 64-19-7): "Present" As Carboxylic acids, C1-5 [68937-68-8] (NDSL)  
 Acetic Acid (CAS # 64-19-7): Present (DSL)  
 Acetic Acid (CAS # 64-19-7): Present (NDSL)  
 Iron (CAS # 7439-89-6): "Present" As Iron [7439-89-6] (DSL)  
 Iron (CAS # 7439-89-6): Present (DSL)  
 Magnesium (CAS # 7439-95-4): "Present" As Magnesium [7439-95-4] (DSL)  
 Magnesium (CAS # 7439-95-4): Present (DSL)  
 Hydrochloric Acid (CAS # 7647-01-0): "Present" As Hydrogen chloride [7647-01-0] (DSL)  
 Hydrochloric Acid (CAS # 7647-01-0): Present (DSL)  
 Hydrofluoric Acid (CAS # 7664-39-3): "Present" As Hydrogen fluoride [7664-39-3] (DSL)  
 Hydrofluoric Acid (CAS # 7664-39-3): Present (DSL)  
 Nitric Acid (CAS # 7697-37-2): "Present" As Nitric acid [7697-37-2] (DSL)  
 Nitric Acid (CAS # 7697-37-2): Present (DSL)  
 Ammonium Dihydrogen Phosphate (CAS # 7722-76-1): Present (DSL)  
 Water (CAS # 7732-18-5): "Present" As Water [7732-18-5] (DSL)  
 Water (CAS # 7732-18-5): Present (DSL)  
 Ammonium Sulfate (CAS # 7783-20-2): "Present" As Ammonium sulfate [7783-20-2] (DSL)  
 Ammonium Sulfate (CAS # 7783-20-2): Present (DSL)  
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### 15.10. United States of America Toxic Substances Control Act (TSCA) List

All components of this solution are listed as active on the TSCA Inventory or are mixtures (hydrates) of active items listed on the TSCA Inventory.



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Ammonium Molybdate (CAS # 13106-76-8): "Present (ACTIVE)" As Molybdate ( $\text{MoO}_4^{2-}$ ), ammonium (1:2), (T-4)- [13106-76-8]  
Ammonium Molybdate (CAS # 13106-76-8): Present (ACTIVE)  
Ammonium Hydroxide (CAS # 1336-21-6): "Present (ACTIVE)" As Ammonium hydroxide ( $(\text{NH}_4)(\text{OH})$ ) [1336-21-6]  
Ammonium Hydroxide (CAS # 1336-21-6): Present (ACTIVE)  
Ammonium Hexafluorotitanate (CAS # 16962-40-6): Present (ACTIVE)  
Calcium Carbonate (CAS # 471-34-1): "Present (ACTIVE)" As Carbonic acid, calcium salt (1:1) [471-34-1]  
Calcium Carbonate (CAS # 471-34-1): Present (ACTIVE)  
Sodium Carbonate (CAS # 497-19-8): "Present (ACTIVE)" As Carbonic acid sodium salt (1:2) [497-19-8]  
Sodium Carbonate (CAS # 497-19-8): Present (ACTIVE)  
Potassium Carbonate (CAS # 584-08-7): "Present (ACTIVE)" As Carbonic acid, potassium salt (1:2) [584-08-7]  
Potassium Carbonate (CAS # 584-08-7): Present (ACTIVE)  
Acetic Acid (CAS # 64-19-7): "Present (ACTIVE)" As Acetic acid [64-19-7]  
Acetic Acid (CAS # 64-19-7): Present (ACTIVE)  
Iron (CAS # 7439-89-6): "Present (ACTIVE)" As Iron [7439-89-6]  
Iron (CAS # 7439-89-6): Present (ACTIVE)  
Magnesium (CAS # 7439-95-4): "Present (ACTIVE)" As Magnesium [7439-95-4]  
Magnesium (CAS # 7439-95-4): Present (ACTIVE)  
Hydrochloric Acid (CAS # 7647-01-0): "Present (ACTIVE)" As Hydrochloric acid [7647-01-0]  
Hydrochloric Acid (CAS # 7647-01-0): Present (ACTIVE)  
Hydrofluoric Acid (CAS # 7664-39-3): "Present (ACTIVE)" As Hydrofluoric acid [7664-39-3]  
Hydrofluoric Acid (CAS # 7664-39-3): Present (ACTIVE)  
Nitric Acid (CAS # 7697-37-2): "Present (ACTIVE)" As Nitric acid [7697-37-2]  
Nitric Acid (CAS # 7697-37-2): Present (ACTIVE)  
Ammonium Dihydrogen Phosphate (CAS # 7722-76-1): Present (ACTIVE)  
Water (CAS # 7732-18-5): "Present (ACTIVE)" As Water [7732-18-5]  
Water (CAS # 7732-18-5): Present (ACTIVE)  
Ammonium Sulfate (CAS # 7783-20-2): "Present (ACTIVE)" As Sulfuric acid ammonium salt (1:2) [7783-20-2]  
Ammonium Sulfate (CAS # 7783-20-2): Present (ACTIVE)  
Aluminum Nitrate Nonahydrate (CAS # 7784-27-2): "Pr



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

Ammonium Molybdate (CAS # 13106-76-8): "236-031-3" As Ammonium molybdate(VI) [13106-76-8]

Ammonium Molybdate (CAS # 13106-76-8): 236-031-3

Ammonium Hydroxide (CAS # 1336-21-6): "215-647-6" As Ammonia, aqueous solution [1336-21-6]

Ammonium Hydroxide (CAS # 1336-21-6): 215-647-6

Ammonium Hydroxide (CAS # 1336-21-6): 231-635-3

Ammonium Hexafluorotitanate (CAS # 16962-40-6): 241-036-9

Calcium Carbonate (CAS # 471-34-1): "207-439-9" As Calcium carbonate [471-34-1]

Calcium Carbonate (CAS # 471-34-1): 207-439-9

Sodium Carbonate (CAS # 497-19-8): "207-838-8" As Disodium carbonate [497-19-8]

Sodium Carbonate (CAS # 497-19-8): 207-838-8

Sodium Carbonate (CAS # 497-19-8): 231-420-4

Potassium Carbonate (CAS # 584-08-7): "209-529-3" As Potassium carbonate [584-08-7]

Potassium Carbonate (CAS # 584-08-7): 209-529-3

Potassium Carbonate (CAS # 584-08-7): 241-378-9

Acetic Acid (CAS # 64-19-7): "200-580-7" As Acetic acid [64-19-7]

Acetic Acid (CAS # 64-19-7): 200-580-7

Acetic Acid (CAS # 64-19-7): 273-079-4

Iron (CAS # 7439-89-6): "231-096-4" As Iron [7439-89-6]

Iron (CAS # 7439-89-6): 231-096-4

Magnesium (CAS # 7439-95-4): "231-104-6" As Magnesium [7439-95-4]

Magnesium (CAS # 7439-95-4): 231-104-6

Hydrochloric Acid (CAS # 7647-01-0): "231-595-7" As Hydrogen chloride [7647-01-0]

Hydrochloric Acid (CAS # 7647-01-0): 231-595-7

Hydrofluoric Acid (CAS # 7664-39-3): "231-634-8" As Hydrogen fluoride [7664-39-3]

Hydrofluoric Acid (CAS # 7664-39-3): 231-634-8

Nitric Acid (CAS # 7697-37-2): "231-714-2" As Nitric acid [7697-37-2]

Nitric Acid (CAS # 7697-37-2): 231-714-2

Ammonium Dihydrogen Phosphate (CAS # 7722-76-1): 231-764-5

Ammonium Dihydrogen Phosphate (CAS # 7722-76-1): 233-330-0

Water (CAS # 7732-18-5): "231-791-2" As Water [7732-18-5]

Water (CAS # 7732-18-5): 231-791-2

Ammonium Sulfate (CAS # 7783-20-2): "231-984-1" As Ammonium sulphate [7783-20-2]

Ammonium Sulfate (CAS # 7783-20-2): 231-984-1

Aluminum Nitrate Nonahydrate (CAS # 7784-27-2): "236-751-8" As Aluminium nitrate [13473-90-0]



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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.

Keep only in original container. 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. 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.). 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.

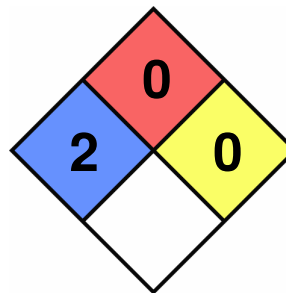
**Physical Hazards Not Otherwise Classified (PHNOC):** Not Applicable.

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

**Biohazardous Infectious Materials Hazard Class:** Not Applicable.

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

Health: 2  
 Flammability: 0  
 Reactivity: 0  
 Special Hazard:



#### 16.4. Document Revision

**Last Revision Date:** 2025-02-02



## 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.