

Classified According to OSHA Hazard Communication Standard (HCS)

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Mixed Calibration Standard 5R, ICP

Product Number: RMXCL5R
Other Identifying Product Numbers: RMXCL5R-500

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	
Hazard Class	Category	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

Product Number: RMXCL5R Page 1 of 19



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.

Product Number: RMXCL5R Page 2 of 19



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	96.74
Nitric Acid	HNO ₃	63.01 g/mol	7697-37-2	2.37
Magnesium Chloride	MgCl ₂	95.21 g/mol	7786-30-3	0.81
Tartaric Acid	HOOC(CHOH) ₂ COOl	H 150.08 g/mol	87-69-4	< 0.1
Antimony	Sb	121.76 g/mol	7440-36-0	< 0.1
Thallium	TI	204.38 g/mol	7440-28-0	< 0.1
Silver Nitrate	AgNO₃	169.87 g/mol	7761-88-8	< 0.1
Hydrochloric Acid	HCI	36.46 g/mol	7647-01-0	< 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.

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

Causes severe skin burns and eye damage. Causes serious eye damage.

4.3. Medical Attention or Special Treatment Needed

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

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.

Product Number: RMXCL5R Page 3 of 19

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.

Product Number: RMXCL5R Page 4 of 19



Safety Data Sheet

SECTION 8: Exposure Controls / Personal Protection

8.1 Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Thallium (7440-28-0)	TLV-TWA	USA	"0.02 mg/m³ TWA (inhalable particulate matter)" As Thallium [7440-28-0]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Thallium (7440-28-0)	TLV-TWA	USA	"0.02 mg/m³ TWA (inhalable particulate matter)" As Thallium [7440-28-0]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Thallium (7440-28-0)	TLV-TWA	USA	0.02 mg/m³ TWA (inhalable particulate matter)	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Thallium (7440-28-0)	TLV-TWA	USA	"0.02 mg/m³ TWA (inhalable particulate matter)" As Thallium [7440-28-0]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Thallium (7440-28-0)	TLV-TWA	USA	"0.02 mg/m³ TWA (inhalable particulate matter, as TI)" As Thallium compounds [RR-00575-4]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Antimony (7440-36-0)	TWA	USA	"0.5 mg/m³ TWA" As Antimony [7440-36-0]	U.S OSHA - Final PELs - Time Weighted Averages (TWAs)
Antimony (7440-36-0)	TLV-TWA	USA	"0.5 mg/m³ TWA" As Antimony [7440-36-0]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Antimony (7440-36-0)	TLV-TWA	USA	"0.5 mg/m³ TWA" As Antimony [7440-36-0]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Antimony (7440-36-0)	TWA	USA	"0.5 mg/m³ TWA" As Antimony [7440-36-0]	U.S OSHA - Final PELs - Time Weighted Averages (TWAs)
Antimony (7440-36-0)	TWA	USA	0.5 mg/m³ TWA	U.S OSHA - Final PELs - Time Weighted Averages (TWAs)
Antimony (7440-36-0)	TLV-TWA	USA	0.5 mg/m³ TWA	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Antimony (7440-36-0)	TLV-TWA	USA	"0.5 mg/m³ TWA (as Sb)" As Antimony compounds [RR-00585-6]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Antimony (7440-36-0)	TWA	USA	"0.5 mg/m³ TWA (as Sb)" As Antimony compounds [RR-00585-6]	U.S OSHA - Final PELs - Time Weighted Averages (TWAs)

Product Number: RMXCL5R Page 5 of 19



Safety Data Sheet

Antimony (7440-36-0)	TLV-TWA	USA	"0.5 mg/m³ TWA (as Sb)" As Antimony compounds [RR-00585-6]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Antimony (7440-36-0)	TWA	USA	"0.5 mg/m³ TWA (as Sb)" As Antimony compounds [RR-00585-6]	U.S OSHA - Final PELs - Time Weighted Averages (TWAs)
Antimony (7440-36-0)	TLV-TWA	USA	"0.5 mg/m³ TWA" As Antimony [7440-36-0]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Antimony (7440-36-0)	TWA	USA	"0.5 mg/m³ TWA" As Antimony [7440-36-0]	U.S OSHA - Final PELs - Time Weighted Averages (TWAs)
Hydrochloric Acid (7647-01-0)	PEL-Ceiling	USA	"5 ppm Ceiling; 7 mg/m ³ 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)
Hydrochloric Acid (7647-01-0)	PEL-Ceiling	USA	"5 ppm Ceiling; 7 mg/m³ 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/m³ 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/m³ 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/m³ 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)

Product Number: RMXCL5R Page 6 of 19



Safety Data Sheet

Hydrochloric Acid (7647-01-0)	PEL-Ceiling	USA	"5 ppm Ceiling; 7 mg/m³ 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/m³ 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/m³ 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)
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/m³ 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/m³ 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/m³ TWA	U.S OSHA - Final PELs - Time Weighted Averages (TWAs)
Nitric Acid (7697-37-2)	TWA	USA	"2 ppm TWA; 5 mg/m³ 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)

Product Number: RMXCL5R Page 7 of 19



Safety Data Sheet

Nitric Acid (7697-37-2)	TLV-STEL	USA	"4 ppm STEL" As Nitric acid	ACGIH - Threshold Limit Values - Short
,			[7697-37-2]	Term Exposure Limits (TLV-STEL)
Nitric Acid (7697-37-2)	TWA	USA	"2 ppm TWA; 5 mg/m ³	U.S OSHA - Final PELs - Time
			TWA" As Nitric acid	Weighted Averages (TWAs)
			[7697-37-2]	
Nitric Acid (7697-37-2)	TLV-STEL	USA	"4 ppm STEL" As Nitric acid	ACGIH - Threshold Limit Values - Short
			[7697-37-2]	Term Exposure Limits (TLV-STEL)
Nitric Acid (7697-37-2)	TLV-TWA	USA	"2 ppm TWA" As Nitric acid	ACGIH - Threshold Limit Values - Time
			[7697-37-2]	Weighted Averages (TLV-TWA)
Nitric Acid (7697-37-2)	TWA	USA	"2 ppm TWA; 5 mg/m ³	U.S OSHA - Final PELs - Time
			TWA" As Nitric acid	Weighted Averages (TWAs)
			[7697-37-2]	
Nitric Acid (7697-37-2)	TLV-TWA	USA	"2 ppm TWA" As Nitric acid	ACGIH - Threshold Limit Values - Time
			[7697-37-2]	Weighted Averages (TLV-TWA)
Nitric Acid (7697-37-2)	TLV-STEL	USA	"4 ppm STEL" As Nitric acid	ACGIH - Threshold Limit Values - Short
			[7697-37-2]	Term Exposure Limits (TLV-STEL)
Nitric Acid (7697-37-2)	TLV-TWA	USA	"2 ppm TWA" As Nitric acid	ACGIH - Threshold Limit Values - Time
			[7697-37-2]	Weighted Averages (TLV-TWA)
Nitric Acid (7697-37-2)	TLV-STEL	USA	"4 ppm STEL" As Nitric acid	ACGIH - Threshold Limit Values - Short
			[7697-37-2]	Term Exposure Limits (TLV-STEL)
Nitric Acid (7697-37-2)	TWA	USA	"2 ppm TWA; 5 mg/m ³	U.S OSHA - Final PELs - Time
			TWA" As Nitric acid	Weighted Averages (TWAs)
			[7697-37-2]	
Silver Nitrate (7761-88-8)	TWA	USA	"0.01 mg/m³ TWA (as Ag)"	U.S OSHA - Final PELs - Time
			As Silver soluble compounds	Weighted Averages (TWAs)
			[RR-00041-9]	
Silver Nitrate (7761-88-8)	TLV-TWA	USA	"0.01 mg/m³ TWA (as Ag)"	ACGIH - Threshold Limit Values - Time
			As Silver soluble compounds	Weighted Averages (TLV-TWA)
			[RR-00041-9]	
Silver Nitrate (7761-88-8)	TWA	USA	0.01 mg/m ³ TWA (as Ag)	U.S OSHA - Final PELs - Time
				Weighted Averages (TWAs)
Silver Nitrate (7761-88-8)	TLV-TWA	USA	0.01 mg/m ³ TWA (as Ag)	ACGIH - Threshold Limit Values - Time
				Weighted Averages (TLV-TWA)

8.2. Exposure Controls

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

Skin Protection: Wear protective gloves and eye protection. **Eye Protection:** Wear protective gloves and eye protection.

Product Number: RMXCL5R Page 8 of 19



8.3. Personal Protective Equipment

Wear protective gloves and eye protection.

SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Appearance: Colorless liquid

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: 1.0

Solubility: Data not available.

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.

Product Number: RMXCL5R Page 9 of 19

10.4. Hazardous Decomposition Products

May emit irritating fumes when heated to decomposition.

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.). 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.

Product Number: RMXCL5R Page 10 of 19

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: 500 mL

UN Number: UN3264

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

Hazard Class: 8

Packing Group: |||

Hazard Label(s):



Product Number: RMXCL5R Page 11 of 19



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

Sizes: 500 mL

UN Number: UN3264

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

Hazard Class: 8

Packing Group: |||

Hazard Label(s):



14.3 Transportation of Dangerous Goods (TDG, Canada)

Sizes: 500 mL

UN Number: UN3264

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

Hazard Class: 8

Packing Group: |||

Hazard Label(s):



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

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)

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

Product Number: RMXCL5R Page 12 of 19

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

Thallium (CAS # 7440-28-0): "1000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the sol metal released is >100 μ m); 454 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 μ m)" As Thallium [7440-28-0]

Thallium (CAS # 7440-28-0): 1000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 454 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)

Antimony (CAS # 7440-36-0): "5000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the sc metal released is >100 µm); 2270 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solic metal released is >100 µm)" As Antimony [7440-36-0]

Antimony (CAS # 7440-36-0): 10 lb final RQ; 4.54 kg final RQ

Antimony (CAS # 7440-36-0): 5000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the soli metal released is >100 μ m); 2270 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the soli metal released is >100 μ m)

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

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

Silver Nitrate (CAS # 7761-88-8): "1 lb final RQ; 0.454 kg final RQ" As Silver nitrate [7761-88-8]

Silver Nitrate (CAS # 7761-88-8): 1 lb final RQ; 0.454 kg final RQ

Product Number: RMXCL5R Page 13 of 19



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

Thallium (CAS # 7440-28-0): "1.0 % de minimis concentration (includes any unique chemical substance that contains Thallium as part of that chemical infrastructure, listed under Chemical Category N760)" As Thallium compounds [RR-00575-4]

Thallium (CAS # 7440-28-0): "1.0 % de minimis concentration" As Thallium [7440-28-0]

Thallium (CAS # 7440-28-0): 1.0 % de minimis concentration

Antimony (CAS # 7440-36-0): "1.0 % de minimis concentration (includes any unique chemical substance that contains Antimony as part of that chemic infrastructure, listed under Chemical Category N010)" As Antimony compounds [RR-00585-6]

Antimony (CAS # 7440-36-0): "1.0 % de minimis concentration" As Antimony [7440-36-0]

Antimony (CAS # 7440-36-0): 1.0 % de minimis concentration

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

Nitric Acid (CAS # 7697-37-2): "1.0 % de minimis concentration" As Nitric acid [7697-37-2]

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

Silver Nitrate (CAS # 7761-88-8): "1.0 % de minimis concentration (includes any unique chemical substance that includes Silver as part of that chemic infrastructure, listed under Chemical Category N740)" As Silver compounds [RR-00574-3]

Silver Nitrate (CAS # 7761-88-8): "1.0 % de minimis concentration (includes any unique chemical substance that includes Silver as part of that chemic infrastructure, listed under Chemical Category N740)" As Silver compounds [RR-00574-3];

"1.0 % de minimis concentration (reportable only when in aqueous solution, listed under Chemical Category N511)" As Nitrate compounds, water dissociable [RR-03804-0]

Silver Nitrate (CAS # 7761-88-8): 1.0 % de minimis concentration (

15.5. Massachusetts Right-to-Know Substance List

Thallium (CAS # 7440-28-0): "Present" As Thallium [7440-28-0]

Thallium (CAS # 7440-28-0): Present

Antimony (CAS # 7440-36-0): "Present" As Antimony [7440-36-0]

Antimony (CAS # 7440-36-0): Present

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

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

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

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

Silver Nitrate (CAS # 7761-88-8): "Present" As Silver nitrate [7761-88-8]

Silver Nitrate (CAS # 7761-88-8): Present

Product Number: RMXCL5R Page 14 of 19



Safety Data Sheet

15.6. Pennsylvania Right-to-Know Hazardous Substances

Thallium (CAS # 7440-28-0): "Environmental hazard" As Thallium [7440-28-0]

Thallium (CAS # 7440-28-0): "Environmental hazard" As Thallium compounds [RR-00575-4]

Thallium (CAS # 7440-28-0): "Present" As Thallium [7440-28-0]

Thallium (CAS # 7440-28-0): "Present" As Thallium compounds [RR-00575-4]

Thallium (CAS # 7440-28-0): Environmental hazard

Thallium (CAS # 7440-28-0): Present

Antimony (CAS # 7440-36-0): "Environmental hazard" As Antimony [7440-36-0]

Antimony (CAS # 7440-36-0): "Environmental hazard" As Antimony compounds [RR-00585-6]

Antimony (CAS # 7440-36-0): "Present" As Antimony [7440-36-0]

Antimony (CAS # 7440-36-0): "Present" As Antimony compounds [RR-00585-6]

Antimony (CAS # 7440-36-0): Environmental hazard

Antimony (CAS # 7440-36-0): 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

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

Silver Nitrate (CAS # 7761-88-8): "Environmental hazard" As Nitric acid, silver(1+) salt [7761-88-8]

Silver Nitrate (CAS # 7761-88-8): "Environmental hazard" As Silver compounds [RR-00574-3]

Silver Nitrate (CAS # 7761-88-8): "Present" As Nitric acid, silver(1+) salt [7761-88-8]

Silver Nitrate (CAS # 7761-88-8): "Present" As Silver compounds [RR-00574-3]

Silver Nitrate (CAS # 7761-88-8): Environmental hazard

Silver Nitrate (CAS # 7761-88-8): Present

Product Number: RMXCL5R Page 15 of 19

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

Thallium (CAS # 7440-28-0): "flammable - third degree" As Thallium [7440-28-0]

Thallium (CAS # 7440-28-0): "SN 1840 500 lb TPQ" As Thallium [7440-28-0]

Thallium (CAS # 7440-28-0): "sn 1840" As Thallium [7440-28-0]

Thallium (CAS # 7440-28-0): "SN 2809 500 lb TPQ (Category Code N760. Includes any unique chemical substance that contains the named metal as

part of that chemical structure)" As Thallium compounds [RR-00575-4]

Thallium (CAS # 7440-28-0): "sn 2809" As Thallium compounds [RR-00575-4]

Thallium (CAS # 7440-28-0): flammable - third degree

Thallium (CAS # 7440-28-0): sn 1840

Thallium (CAS # 7440-28-0): SN 1840 500 lb TPQ

Antimony (CAS # 7440-36-0): "SN 0141 500 lb TPQ" As Antimony [7440-36-0]

Antimony (CAS # 7440-36-0): "sn 0141" As Antimony [7440-36-0]

Antimony (CAS # 7440-36-0): "SN 2223 500 lb TPQ (Category Code N010. Includes any unique chemical substance that contains the named metal as

part of that chemical structure)" As Antimony compounds [RR-00585-6]

Antimony (CAS # 7440-36-0): "sn 2223" As Antimony compounds [RR-00585-6]

Antimony (CAS # 7440-36-0): sn 0141

Antimony (CAS # 7440-36-0): SN 0141 500 lb TPQ

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)

Nitric Acid (CAS # 7697-37-2): "corrosive; reactive - second degree" As Nitric acid [7697-37-2]

Nitric Acid (CAS # 7697-37-2): "SN 1356 500 lb TPQ" As Nitric acid [7697-37-2]

Nitric Acid (CAS # 7697-37-2): "sn 1356" As Nitric acid [7697-37-2]

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

Nitr

15.8. California Proposition 65

Not listed.

Product Number: RMXCL5R Page 16 of 19

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

Thallium (CAS # 7440-28-0): "Present" As Thallium [7440-28-0] (DSL)

Thallium (CAS # 7440-28-0): Present (DSL)

Antimony (CAS # 7440-36-0): "Present" As Antimony [7440-36-0] (DSL)

Antimony (CAS # 7440-36-0): Present (DSL)

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

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

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

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

Water (CAS # 7732-18-5): "Present" As Water [7732-18-5] (DSL)

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

Silver Nitrate (CAS # 7761-88-8): "Present" As Silver nitrate [7761-88-8] (DSL)

Silver Nitrate (CAS # 7761-88-8): Present (DSL)

Magnesium Chloride (CAS # 7786-30-3): "Present" As Magnesium chloride [7786-30-3] (DSL)

Magnesium Chloride (CAS # 7786-30-3): Present (DSL)

Tartaric Acid (CAS # 87-69-4): "Present" As Butanedioic acid, 2,3-dihydroxy- [R-(R*,R*)]- [87-69-4] (DSL)

Tartaric Acid (CAS # 87-69-4): Present (DSL)

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.

Thallium (CAS # 7440-28-0): "Present (ACTIVE)" As Thallium [7440-28-0]

Thallium (CAS # 7440-28-0): Present (ACTIVE)

Antimony (CAS # 7440-36-0): "Present (ACTIVE)" As Antimony [7440-36-0]

Antimony (CAS # 7440-36-0): Present (ACTIVE)

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

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

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

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

Water (CAS # 7732-18-5): "Present (ACTIVE)" As Water [7732-18-5]

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

Silver Nitrate (CAS # 7761-88-8): "Present (ACTIVE)" As Nitric acid silver(1+) salt (1:1) [7761-88-8]

Silver Nitrate (CAS # 7761-88-8): Present (ACTIVE)

Magnesium Chloride (CAS # 7786-30-3): "Present (ACTIVE)" As Magnesium chloride (MgCl2) [7786-30-3]

Magnesium Chloride (CAS # 7786-30-3): Present (ACTIVE)

Tartaric Acid (CAS # 87-69-4): "Present (ACTIVE)" As Butanedioic acid, 2,3-dihydroxy- (2R,3R)- [87-69-4]

Tartaric Acid (CAS # 87-69-4): Present (ACTIVE)

Product Number: RMXCL5R Page 17 of 19



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

Thallium (CAS # 7440-28-0): "231-138-1" As Thallium [7440-28-0]

Thallium (CAS # 7440-28-0): 231-138-1

Antimony (CAS # 7440-36-0): "231-146-5" As Antimony [7440-36-0]

Antimony (CAS # 7440-36-0): 231-146-5

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

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

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

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

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

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

Silver Nitrate (CAS # 7761-88-8): "231-853-9" As Silver nitrate [7761-88-8]

Silver Nitrate (CAS # 7761-88-8): 231-853-9

Magnesium Chloride (CAS # 7786-30-3): "232-094-6" As Magnesium chloride [7786-30-3]

Magnesium Chloride (CAS # 7786-30-3): 232-094-6

Tartaric Acid (CAS # 87-69-4): "201-766-0" As (+)-Tartaric acid [87-69-4]

Tartaric Acid (CAS # 87-69-4): 201-766-0

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.

Product Number: RMXCL5R Page 18 of 19



16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.

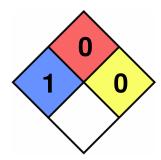
Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.

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

Biohazardous Infectious Materials Hazard Class: Not Applicable.

16.3. National Fire Protection Association (NFPA) Rating

Health: 1
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.

Product Number: RMXCL5R Page 19 of 19