

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS)

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Profile Solution

Product Number: RPLAS1

Other Identifying Product Numbers: RPLAS1-100

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

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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 immediately).
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner liner.
P501	Dispose of contents in accordance with local, state, federal and international regulations.

2.4. 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 ₂ O	18.01 g/mol	7732-18-5	95.14
Nitric Acid	HNO ₃	63.01 g/mol	7697-37-2	4.85
Selenium	Se	78.95 g/mol	7782-49-2	< 0.1
Arsenic	As	74.92 g/mol	7440-38-2	< 0.1
Thallium	Tl	204.38 g/mol	7440-28-0	< 0.1
Lead	Pb	207.2 g/mol	7439-92-1	< 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 immediately).

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Not considered to be a fire or explosion hazard.

5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard.

5.3. Special Protective Equipment for Firefighters

Wear protective clothing and NIOSH-approved breathing equipment appropriate for the surrounding fire.

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SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

6.2. Cleanup and Containment Methods and Materials

Absorb with suitable material and dispose of in accordance with local regulations.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

Store in corrosive resistant container with a resistant inner liner.

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SECTION 8: Exposure Controls / Personal Protection

8.1 Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Lead (7439-92-1)	PEL	USA	"30 µg/m³ Action Level (See 29 CFR 1910.1025); 50 µg/m³ TWA" As Lead [7439-92-1]	U.S. - OSHA - Specifically Regulated Chemicals with PELs
Lead (7439-92-1)	TLV-TWA	USA	"0.05 mg/m³ TWA" As Lead [7439-92-1]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Lead (7439-92-1)	TWA	USA	"50 µg/m³ TWA" As Lead [7439-92-1]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Lead (7439-92-1)	TLV-TWA	USA	0.05 mg/m³ TWA	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Lead (7439-92-1)	TWA	USA	50 µg/m³ TWA	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Lead (7439-92-1)	PEL	USA	30 µg/m³ Action Level (See 29 CFR 1910.1025); 50 µg/m³ TWA	U.S. - OSHA - Specifically Regulated Chemicals with PELs
Lead (7439-92-1)	PEL	USA	"30 µg/m³ Action Level (See 29 CFR 1910.1025, as Pb); 50 µg/m³ TWA (as Pb)" As Lead, inorganic compounds [RR-00538-9]	U.S. - OSHA - Specifically Regulated Chemicals with PELs
Lead (7439-92-1)	TLV-TWA	USA	"0.05 mg/m³ TWA (as Pb)" As Lead inorganic compounds [RR-00538-9]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Lead (7439-92-1)	TWA	USA	"50 µg/m³ TWA (as Pb)" As Lead, inorganic compounds [RR-00538-9]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
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)

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Thallium (7440-28-0)	TLV-TWA	USA	"0.02 mg/m ³ 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/m ³ TWA (inhalable particulate matter, as Tl)" As Thallium compounds [RR-00575-4]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Arsenic (7440-38-2)	TLV-TWA	USA	"0.01 mg/m ³ TWA" As Arsenic, elemental [7440-38-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Arsenic (7440-38-2)	TLV-TWA	USA	"0.01 mg/m ³ TWA" As Arsenic, elemental [7440-38-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Arsenic (7440-38-2)	TLV-TWA	USA	0.01 mg/m ³ TWA	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Arsenic (7440-38-2)	TLV-TWA	USA	"0.01 mg/m ³ TWA (as As)" As Arsenic inorganic compounds [RR-00065-7]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Arsenic (7440-38-2)	TWA	USA	"10 µg/m ³ TWA (as As)" As Arsenic, inorganic compounds [RR-00065-7]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Arsenic (7440-38-2)	PEL	USA	"10 µg/m ³ TWA (See 29 CFR 1910.1018; except Arsine, as As); 5 µg/m ³ Action Level (as As)" As Inorganic arsenic compounds [RR-00065-7]	U.S. - OSHA - Specifically Regulated Chemicals with PELs
Arsenic (7440-38-2)	TLV-TWA	USA	"0.01 mg/m ³ TWA" As Arsenic, elemental [7440-38-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Arsenic (7440-38-2)	TLV-TWA	USA	"0.01 mg/m ³ TWA" As Arsenic, elemental [7440-38-2]	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)	TWA	USA	"2 ppm TWA; 5 mg/m ³ TWA" As Nitric acid [7697-37-2]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)

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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 ³ 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 ³ TWA	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Nitric Acid (7697-37-2)	TWA	USA	"2 ppm TWA; 5 mg/m ³ 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 ³ 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-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 ³ 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 ³ TWA" As Nitric acid [7697-37-2]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)

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Selenium (7782-49-2)	TLV-TWA	USA	"0.2 mg/m ³ TWA" As Selenium [7782-49-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Selenium (7782-49-2)	TLV-TWA	USA	"0.2 mg/m ³ TWA" As Selenium [7782-49-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Selenium (7782-49-2)	TLV-TWA	USA	"0.2 mg/m ³ TWA" As Selenium [7782-49-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Selenium (7782-49-2)	TLV-TWA	USA	"0.2 mg/m ³ TWA" As Selenium [7782-49-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Selenium (7782-49-2)	TLV-TWA	USA	"0.2 mg/m ³ TWA" As Selenium [7782-49-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Selenium (7782-49-2)	TLV-TWA	USA	"0.2 mg/m ³ TWA" As Selenium [7782-49-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Selenium (7782-49-2)	TLV-TWA	USA	"0.2 mg/m ³ TWA" As Selenium [7782-49-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Selenium (7782-49-2)	TLV-TWA	USA	"0.2 mg/m ³ TWA" As Selenium [7782-49-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Selenium (7782-49-2)	TLV-TWA	USA	"0.2 mg/m ³ TWA" As Selenium [7782-49-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Selenium (7782-49-2)	TLV-TWA	USA	"0.2 mg/m ³ TWA" As Selenium [7782-49-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Selenium (7782-49-2)	TLV-TWA	USA	"0.2 mg/m ³ TWA" As Selenium [7782-49-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Selenium (7782-49-2)	TLV-TWA	USA	"0.2 mg/m ³ TWA" As Selenium [7782-49-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Selenium (7782-49-2)	TLV-TWA	USA	0.2 mg/m ³ TWA	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Selenium (7782-49-2)	TLV-TWA	USA	"0.2 mg/m ³ TWA" As Selenium [7782-49-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Selenium (7782-49-2)	TLV-TWA	USA	"0.2 mg/m ³ TWA (as Se)" As Selenium compounds [RR-00612-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Selenium (7782-49-2)	TWA	USA	"0.2 mg/m ³ TWA (as Se)" As Selenium compounds [RR-00612-2]	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: 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.

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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: 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.

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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 immediately). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Serious Eye Damage and Irritation:

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

Lead (CAS # 7439-92-1): "30 µg/m³ Action Level (See 29 CFR 1910.1025); 50 µg/m³ TWA (See 29 CFR 1910.1025)" As Lead [7439-92-1]

Lead (CAS # 7439-92-1): "30 µg/m³ Action Level (See 29 CFR 1910.1025, as Pb); 50 µg/m³ TWA (See 29 CFR 1910.1025, as Pb)" As Lead, inorganic compounds [RR-00538-9]

Lead (CAS # 7439-92-1): 30 µg/m³ Action Level (See 29 CFR 1910.1025); 50 µg/m³ TWA (See 29 CFR 1910.1025)

Arsenic (CAS # 7440-38-2): "10 µg/m³ TWA (See 29 CFR 1910.1018, except Arsine, as As); 5 µg/m³ Action Level (See 29 CFR 1910.1018, except Arsine, as As)" As Inorganic arsenic compounds [RR-00065-7]

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

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

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

Lead (CAS # 7439-92-1): "10 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); 4.54 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)" As Lead [7439-92-1]

Lead (CAS # 7439-92-1): 10 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); 4.54 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)

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)" 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)

Arsenic (CAS # 7440-38-2): "1 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); 0.454 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)" As Arsenic [7440-38-2]

Arsenic (CAS # 7440-38-2): 1 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); 0.454 kg final RQ (no reporting of releases of this hazardous substance is required if the

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

Lead (CAS # 7439-92-1): "100 lb RT (this lower threshold does not apply to lead when it is contained in stainless steel, brass or bronze alloy)" As Lead [7439-92-1]

Lead (CAS # 7439-92-1): "100 lb RT" As Lead compounds [RR-00630-4]

Lead (CAS # 7439-92-1): "not eligible for the de minimis exemption" As Lead [7439-92-1]

Lead (CAS # 7439-92-1): "not eligible for the de minimis exemption, listed under Chemical Category N420" As Inorganic lead compounds [RR-00538-1]
"not eligible for the de minimis exemption" As Lead compounds [RR-00630-4]

Lead (CAS # 7439-92-1): 100 lb RT (this lower threshold does not apply to lead when it is contained in stainless steel, brass or bronze alloy)

Lead (CAS # 7439-92-1): not eligible for the de minimis exemption

Thallium (CAS # 7440-28-0): "1.0 % de minimis concentration (includes any unique chemical substance that contains Thallium as part of that chemical's 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

Arsenic (CAS # 7440-38-2): "0.1 % de minimis concentration (includes any unique chemical substance that contains Arsenic as part of that chemical's infrastructure, listed under Chemical Category N020)" As Arsenic, inorganic compounds [RR-00065-7]

Arsenic (CAS # 7440-38-2): "0.1 % de minimis concentration" As Arsenic [7440-38-2]

Arsenic (CAS # 7440-38-2): 0.1 % de minimis concentration

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

Selenium (CAS # 7782-49-2): "1.0 % de minimis concentration (includes any unique chemical substance that contains Selenium as part of that chemical's infrastructure, listed under Chemical Category N725)" As Selenium compounds [RR-00612-2]

Selenium (CAS # 7782-49-2): "1.0 % de minimis concentration" As Selenium [7782-49-2]



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15.5. Massachusetts Right-to-Know Substance List

Lead (CAS # 7439-92-1): "Teratogen" As Lead [7439-92-1]

Lead (CAS # 7439-92-1): Teratogen

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

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

Arsenic (CAS # 7440-38-2): "Carcinogen; Extraordinarily hazardous" As Arsenic [7440-38-2]

Arsenic (CAS # 7440-38-2): Carcinogen; Extraordinarily hazardous

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

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

Selenium (CAS # 7782-49-2): "Present" As Selenium [7782-49-2]

Selenium (CAS # 7782-49-2): Present



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15.6. Pennsylvania Right-to-Know Hazardous Substances

Lead (CAS # 7439-92-1): "Environmental hazard" As Lead [7439-92-1]
Lead (CAS # 7439-92-1): "Environmental hazard" As Lead compounds [RR-00630-4]
Lead (CAS # 7439-92-1): "Present" As Lead [7439-92-1]
Lead (CAS # 7439-92-1): "Present" As Lead compounds [RR-00630-4]
Lead (CAS # 7439-92-1): Environmental hazard
Lead (CAS # 7439-92-1): Present
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
Arsenic (CAS # 7440-38-2): "Environmental hazard (including inorganic); Special hazardous substance" As Arsenic [7440-38-2]
Arsenic (CAS # 7440-38-2): "Environmental hazard" As Arsenic compounds [RR-00625-7]
Arsenic (CAS # 7440-38-2): "Present (including inorganic)" As Arsenic [7440-38-2]
Arsenic (CAS # 7440-38-2): "Present" As Arsenic [7440-38-2]
Arsenic (CAS # 7440-38-2): "Present" As Arsenic compounds [RR-00625-7]
Arsenic (CAS # 7440-38-2): Environmental hazard (including inorganic); Special hazardous substance
Arsenic (CAS # 7440-38-2): Present
Arsenic (CAS # 7440-38-2): Present (including inorganic)
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
Selenium (CAS # 7782-49-2): "Environmental hazard" As Selenium [7782-49-2]
Selenium (CAS # 7782-49-2): "Environmental hazard" As Selenium compounds [RR-00612-2]
Selenium (CAS # 7782-49-2): "Present" As Selenium [7782-49-2]
Selenium (CAS # 7782-49-2): "Present" As Selenium compounds [RR-00612-2]
Selenium (CAS # 7782-4

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

Lead (CAS # 7439-92-1): "carcinogen" As Lead compounds [RR-00630-4]

Lead (CAS # 7439-92-1): "carcinogen; teratogen" As Lead [7439-92-1]

Lead (CAS # 7439-92-1): "SN 1096 500 lb TPQ" As Lead [7439-92-1]

Lead (CAS # 7439-92-1): "sn 1096" As Lead [7439-92-1]

Lead (CAS # 7439-92-1): "SN 2266 500 lb TPQ (Category Code N420. Includes any unique chemical substance that contains the named metal as part of that chemical structure)" As Lead compounds [RR-00630-4]

Lead (CAS # 7439-92-1): "sn 2266" As Lead compounds [RR-00630-4]

Lead (CAS # 7439-92-1): carcinogen; teratogen

Lead (CAS # 7439-92-1): sn 1096

Lead (CAS # 7439-92-1): SN 1096 500 lb TPQ

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

Arsenic (CAS # 7440-38-2): "carcinogen; teratogen" As Arsenic [7440-38-2]

Arsenic (CAS # 7440-38-2): "SN 0152 500 lb TPQ" As Arsenic [7440-38-2]

Arsenic (CAS # 7440-38-2): "sn 0152" As Arsenic [7440-38-2]

Arsenic (CAS # 7440-38-2): "SN 2138 500 lb TPQ (Category Code N020. Includes any unique chemical substance that contains the named metal as part of that chemical structure)" As Arsenic compounds [RR-00625-7]

Arsenic (CAS # 7440-38-2): "sn 2138" As Arsenic compounds [RR-00625-7]

Arsenic (CAS # 7440-38-2): carcinogen; teratogen

Arsenic (CAS # 7440-38-2): sn 0152

Arsenic (CAS # 7440-38-2): SN 0152 500 lb TPQ

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

Nitric Acid (C



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15.8. California Proposition 65

Lead (CAS # 7439-92-1): "15 µg/day NSRL (oral)" As Lead [7439-92-1]
Lead (CAS # 7439-92-1): "carcinogen, 10/1/1992" As Lead [7439-92-1]
Lead (CAS # 7439-92-1): "carcinogen, 10/1/1992" As Lead compounds [RR-00630-4]
Lead (CAS # 7439-92-1): "developmental toxicity, 2/27/1987" As Lead [7439-92-1]
Lead (CAS # 7439-92-1): "female reproductive toxicity 2/27/87" As Lead [7439-92-1]
Lead (CAS # 7439-92-1): "male reproductive toxicity, 2/27/87" As Lead [7439-92-1]
Lead (CAS # 7439-92-1): 15 µg/day NSRL (oral)
Lead (CAS # 7439-92-1): carcinogen, 10/1/1992
Lead (CAS # 7439-92-1): developmental toxicity, 2/27/1987
Lead (CAS # 7439-92-1): female reproductive toxicity 2/27/87
Lead (CAS # 7439-92-1): male reproductive toxicity, 2/27/87
Arsenic (CAS # 7440-38-2): "0.06 µg/day NSRL (inhalation); 10 µg/day NSRL (except inhalation)" As Arsenic [7440-38-2]
Arsenic (CAS # 7440-38-2): "0.06 µg/day NSRL (inhalation, listed under Arsenic); 10 µg/day NSRL (except inhalation, listed under Arsenic)" As Arsenic inorganic compounds [RR-00065-7]
Arsenic (CAS # 7440-38-2): "carcinogen, 2/27/1987" As Arsenic, inorganic compounds [RR-00065-7]
Arsenic (CAS # 7440-38-2): 0.06 µg/day NSRL (inhalation); 10 µg/day NSRL (except inhalation)

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

Lead (CAS # 7439-92-1): "Present" As Lead [7439-92-1] (DSL)
Lead (CAS # 7439-92-1): Present (DSL)
Thallium (CAS # 7440-28-0): "Present" As Thallium [7440-28-0] (DSL)
Thallium (CAS # 7440-28-0): Present (DSL)
Arsenic (CAS # 7440-38-2): "Present" As Arsenic [7440-38-2] (DSL)
Arsenic (CAS # 7440-38-2): 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)
Selenium (CAS # 7782-49-2): "Present" As Selenium [7782-49-2] (DSL)
Selenium (CAS # 7782-49-2): 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.

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Lead (CAS # 7439-92-1): "Present (ACTIVE)" As Lead [7439-92-1]
Lead (CAS # 7439-92-1): Present (ACTIVE)
Thallium (CAS # 7440-28-0): "Present (ACTIVE)" As Thallium [7440-28-0]
Thallium (CAS # 7440-28-0): Present (ACTIVE)
Arsenic (CAS # 7440-38-2): "Present (ACTIVE)" As Arsenic [7440-38-2]
Arsenic (CAS # 7440-38-2): 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)
Selenium (CAS # 7782-49-2): "Present (ACTIVE)" As Selenium [7782-49-2]
Selenium (CAS # 7782-49-2): Present (ACTIVE)

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

Lead (CAS # 7439-92-1): "231-100-4" As Lead [7439-92-1]
Lead (CAS # 7439-92-1): 231-100-4
Thallium (CAS # 7440-28-0): "231-138-1" As Thallium [7440-28-0]
Thallium (CAS # 7440-28-0): 231-138-1
Arsenic (CAS # 7440-38-2): "231-148-6" As Arsenic [7440-38-2]
Arsenic (CAS # 7440-38-2): 231-148-6
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
Selenium (CAS # 7782-49-2): "231-957-4" As Selenium [7782-49-2]
Selenium (CAS # 7782-49-2): 231-957-4

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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 immediately). Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.

Store locked up. Store in corrosive resistant container with a resistant inner liner.

Dispose of contents in accordance with local, state, federal and international regulations.

16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.

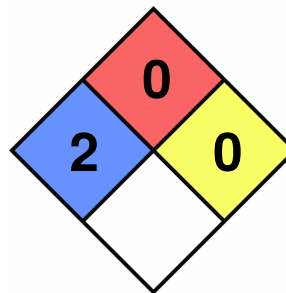
Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.

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

Biohazardous Infectious Materials Hazard Class: Not Applicable.

16.3. National Fire Protection Association (NFPA) Rating

Health: 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.