



Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS)

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: ICP Blend, 12 Elements @ 100 ppm in 5% HNO₃

Product Number: RPMX053N

Other Identifying Product Numbers: RPMX053N-500N

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

Safety Data Sheet

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: |
|--|------------|-------------------|---|
| Acute Toxicity - Inhalation | Category 2 | H330 | P260, P271, P285, P304+P340, P310, P320, P403+P233, P405, P501 |
| 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 |
| Hazardous to the Aquatic Environment (Acute) | Category 2 | H401 | P273, P501 |
| Hazardous to the Aquatic Environment (Chronic) | Category 2 | H411 | P273, P391, P501 |

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. |
| H330 | Fatal if inhaled. |
| H401 | Toxic to aquatic life. |
| H411 | Toxic to aquatic life with long lasting effects. |

Safety Data Sheet

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. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves and eye protection. |
| P285 | In case of inadequate ventilation wear respiratory 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. |
| P320 | Specific treatment is urgent (Wash areas of contact with water.). |
| P321 | Specific treatment (Wash areas of contact with water.). |
| P363 | Wash contaminated clothing before reuse. |
| P390 | Absorb spillage to prevent material damage. |
| P391 | Collect spillage. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| 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.

Safety Data Sheet

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 | 95.04 |
| Nitric Acid | HNO ₃ | 63.01 g/mol | 7697-37-2 | 4.74 |
| Chromium Nitrate Nonahydrate | Cr(NO ₃) ₃ ·9H ₂ O | 238.01 g/mol | 7789-02-8 | < 0.1 |
| Ammonium Hexafluorotitanate | (NH ₄) ₂ TiF ₆ | 197.93 g/mol | 16962-40-6 | < 0.1 |
| Antimony Trioxide | Sb ₂ O ₃ | 291.51 g/mol | 1309-64-4 | < 0.1 |
| Selenium | Se | 78.95 g/mol | 7782-49-2 | < 0.1 |
| Zinc | Zn | 65.40 g/mol | 7440-66-6 | < 0.1 |
| Vanadium | V | 50.94 g/mol | 7440-62-2 | < 0.1 |
| Copper | Cu | 63.54 g/mol | 7440-50-8 | < 0.1 |
| Cobalt | Co | 58.93 g/mol | 7440-48-4 | < 0.1 |
| Cadmium | Cd | 112.41 g/mol | 7440-43-9 | < 0.1 |
| Arsenic | As | 74.92 g/mol | 7440-38-2 | < 0.1 |
| Tin | Sn | 118.71 g/mol | 7440-31-5 | < 0.1 |
| Nickel | Ni | 58.69 g/mol | 7440-02-0 | < 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.

4.2. Most Important Symptoms and Effects, Acute and Delayed

Causes severe skin burns and eye damage. Causes serious eye damage. Fatal if inhaled. Caution! Mildly corrosive liquid. Contains low levels of known and suspected carcinogens. Avoid contact with skin, eyes, and clothing. If swallowed, 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.

Safety Data Sheet

4.3. Medical Attention or Special Treatment Needed

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

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Use water or water spray.

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. May react explosively with combustible organic or readily oxidizable materials such as: alcohols, turpentine, charcoal, organic refuse, metal powder, hydrogen sulfide, etc.

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. In case of inadequate ventilation wear respiratory protection.

6.2. Cleanup and Containment Methods and Materials

Dilute with water, then flush to sewer if local regulations allow. If not allowed, save for recovery or recycling in an approved waste disposal facility. Always dispose of in accordance with local, state and federal 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. Keep out of direct sunlight and away from heat, water, and incompatible materials.

Safety Data Sheet

SECTION 8: Exposure Controls / Personal Protection

8.1 Control Parameters

| Chemical Name | Limit Type | Country | Exposure Limit | Information Source |
|---|------------|---------|--|---|
| Antimony Trioxide (1309-64-4) | TWA | USA | "0.5 mg/m ³ TWA (as Sb)" As Antimony compounds [RR-00585-6] | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Antimony Trioxide (1309-64-4) | TLV-TWA | USA | 0.02 mg/m ³ TWA (inhalable particulate matter) | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Antimony Trioxide (1309-64-4) | TWA | USA | "0.5 mg/m ³ TWA (as Sb)" As Antimony compounds [RR-00585-6] | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Antimony Trioxide (1309-64-4) | TLV-TWA | USA | "0.5 mg/m ³ TWA (as Sb)" As Antimony compounds [RR-00585-6] | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Antimony Trioxide (1309-64-4) | TWA | USA | "0.5 mg/m ³ TWA (as Sb)" As Antimony compounds [RR-00585-6] | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Antimony Trioxide (1309-64-4) | TLV-TWA | USA | "0.5 mg/m ³ TWA (as Sb)" As Antimony compounds [RR-00585-6] | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Antimony Trioxide (1309-64-4) | TLV-TWA | USA | "0.5 mg/m ³ TWA (as Sb)" As Antimony compounds [RR-00585-6] | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Antimony Trioxide (1309-64-4) | TWA | USA | "0.5 mg/m ³ TWA (as Sb)" As Antimony compounds [RR-00585-6] | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Antimony Trioxide (1309-64-4) | TWA | USA | 0.5 mg/m ³ TWA (as Sb) | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Antimony Trioxide (1309-64-4) | TLV-TWA | USA | 0.5 mg/m ³ TWA (as Sb) | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Antimony Trioxide (1309-64-4) | TWA | USA | "0.5 mg/m ³ TWA (as Sb)" As Antimony compounds [RR-00585-6] | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Antimony Trioxide (1309-64-4) | TLV-TWA | USA | "0.5 mg/m ³ TWA (as Sb)" As Antimony compounds [RR-00585-6] | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Ammonium Hexafluorotitanate (16962- TLV-TWA | | USA | "2.5 mg/m ³ TWA (as F)" As Fluorides [RR-02792-9] | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |

Safety Data Sheet

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|---|---------|-----|---|---|
| Ammonium Hexafluorotitanate (16962- TWA | | USA | "2.5 mg/m ³ 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 ³ TWA (as F) | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Ammonium Hexafluorotitanate (16962- TWA | | USA | 2.5 mg/m ³ TWA (as F) | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Nickel (7440-02-0) | TLV-TWA | USA | 1.5 mg/m ³ TWA (inhalable particulate matter) | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Nickel (7440-02-0) | TWA | USA | 1 mg/m ³ TWA | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Tin (7440-31-5) | TLV-TWA | USA | "2 mg/m ³ TWA (excluding tin hydride and indium tin oxide, inhalable particulate matter, as Sn)" As Tin inorganic compounds [RR-00043-1] | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Tin (7440-31-5) | TWA | USA | "2 mg/m ³ TWA (except oxides, as Sn)" As Tin, inorganic compounds [RR-00043-1] | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Tin (7440-31-5) | TWA | USA | "2 mg/m ³ TWA (except oxides, as Sn)" As Tin, inorganic compounds [RR-00043-1] | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
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Safety Data Sheet

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| 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) | 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) | 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) | 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 |
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| 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) |
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Safety Data Sheet

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Safety Data Sheet

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| Cadmium (7440-43-9) | PEL | USA | "5 µg/m ³ TWA (See 29 CFR 1910.1027, as Cd); 2.5 µg/m ³ Action Level (as Cd)" As Cadmium compounds [RR-00559-4] | U.S. - OSHA - Specifically Regulated Chemicals with PELs |
| Cadmium (7440-43-9) | TLV-TWA | USA | "0.01 mg/m ³ TWA (as Cd); 0.002 mg/m ³ TWA (respirable particulate matter, as Cd)" As Cadmium compounds [RR-00559-4] | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
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Safety Data Sheet

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Safety Data Sheet

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| Cadmium (7440-43-9) | PEL | USA | "5 µg/m ³ TWA (See 29 CFR 1910.1027, as Cd); 2.5 µg/m ³ Action Level (as Cd)" As Cadmium compounds [RR-00559-4] | U.S. - OSHA - Specifically Regulated Chemicals with PELs |
| Cadmium (7440-43-9) | TLV-TWA | USA | "0.01 mg/m ³ TWA (as Cd); 0.002 mg/m ³ TWA (respirable particulate matter, as Cd)" As Cadmium compounds [RR-00559-4] | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Cadmium (7440-43-9) | PEL | USA | "5 µg/m ³ TWA (See 29 CFR 1910.1027, as Cd); 2.5 µg/m ³ Action Level (as Cd)" As Cadmium compounds [RR-00559-4] | U.S. - OSHA - Specifically Regulated Chemicals with PELs |
| Cadmium (7440-43-9) | TLV-TWA | USA | "0.01 mg/m ³ TWA (as Cd); 0.002 mg/m ³ TWA (respirable particulate matter, as Cd)" As Cadmium compounds [RR-00559-4] | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Cadmium (7440-43-9) | PEL | USA | "5 µg/m ³ TWA (See 29 CFR 1910.1027, as Cd); 2.5 µg/m ³ Action Level (as Cd)" As Cadmium compounds [RR-00559-4] | U.S. - OSHA - Specifically Regulated Chemicals with PELs |

Safety Data Sheet

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|---------------------|-------------|-----|--|---|
| Cadmium (7440-43-9) | TLV-TWA | USA | "0.01 mg/m ³ TWA (as Cd); 0.002 mg/m ³ TWA (respirable particulate matter, as Cd)" As Cadmium compounds [RR-00559-4] | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Cadmium (7440-43-9) | PEL | USA | 5 µg/m ³ TWA (See 29 CFR 1910.1027); 2.5 µg/m ³ Action Level | U.S. - OSHA - Specifically Regulated Chemicals with PELs |
| Cadmium (7440-43-9) | TLV-TWA | USA | 0.01 mg/m ³ TWA; 0.002 mg/m ³ TWA (respirable particulate matter) | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Cadmium (7440-43-9) | PEL-Ceiling | USA | 0.3 mg/m ³ Ceiling (applies to any operations or sectors for which the Cadmium standard is stayed or otherwise not in effect, fume); 0.6 mg/m ³ Ceiling (applies to any operations or sectors for which the Cadmium standard is stayed or otherwise not in effect, dust) | U.S. - OSHA - Final PELs - Ceiling Limits |
| Cadmium (7440-43-9) | TWA | USA | 5 µg/m ³ TWA | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Cadmium (7440-43-9) | TLV-TWA | USA | "0.01 mg/m ³ TWA (as Cd); 0.002 mg/m ³ TWA (respirable particulate matter, as Cd)" As Cadmium compounds [RR-00559-4] | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Cadmium (7440-43-9) | PEL | USA | "5 µg/m ³ TWA (See 29 CFR 1910.1027, as Cd); 2.5 µg/m ³ Action Level (as Cd)" As Cadmium compounds [RR-00559-4] | U.S. - OSHA - Specifically Regulated Chemicals with PELs |
| Cadmium (7440-43-9) | PEL | USA | "5 µg/m ³ TWA (See 29 CFR 1910.1027, as Cd); 2.5 µg/m ³ Action Level (as Cd)" As Cadmium compounds [RR-00559-4] | U.S. - OSHA - Specifically Regulated Chemicals with PELs |

Safety Data Sheet

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|-------------------------------|-------------|-----|---|--|
| Cadmium (7440-43-9) | TLV-TWA | USA | "0.01 mg/m ³ TWA (as Cd); 0.002 mg/m ³ TWA (respirable particulate matter, as Cd)" As Cadmium compounds [RR-00559-4] | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Cobalt (7440-48-4) | TWA | USA | 0.1 mg/m ³ TWA (dust and fume) | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Cobalt (7440-48-4) | TLV-TWA | USA | 0.02 mg/m ³ TWA (inhalable particulate matter) | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Cobalt (7440-48-4) | TLV-TWA | USA | 0.02 mg/m ³ TWA (inhalable particulate matter, as Co) | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Copper (7440-50-8) | TWA | USA | 0.1 mg/m ³ TWA (fume); 1 mg/m ³ TWA (dust and mist) | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Copper (7440-50-8) | TLV-TWA | USA | 0.2 mg/m ³ TWA (fume) | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Copper (7440-50-8) | TLV-TWA | USA | "1 mg/m ³ TWA (dust and mist, as Cu)" As Copper compounds [RR-00595-8] | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Copper (7440-50-8) | TLV-TWA | USA | "1 mg/m ³ TWA (dust and mist, as Cu)" As Copper compounds [RR-00595-8] | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Vanadium (7440-62-2) | PEL-Ceiling | USA | 0.5 mg/m ³ Ceiling (respirable dust, as V2O5); 0.1 mg/m ³ Ceiling (fume, as V2O5) | U.S. - OSHA - Final PELs - Ceiling Limits |
| Hydrofluoric Acid (7664-39-3) | TWA | USA | "2.5 mg/m ³ TWA (as F)" As Fluorides [RR-02792-9] | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Hydrofluoric Acid (7664-39-3) | TLV-TWA | USA | "2.5 mg/m ³ 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) | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| 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) | TLV-Ceiling | USA | 2 ppm Ceiling (as F) | ACGIH - Threshold Limit Values - Ceilings (TLV-C) |
| Hydrofluoric Acid (7664-39-3) | TLV-TWA | USA | 2.5 mg/m ³ TWA (as F) | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Hydrofluoric Acid (7664-39-3) | TWA | USA | 2.5 mg/m ³ TWA (as F) | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |

Safety Data Sheet

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| 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) | TLV-TWA | USA | 2 ppm TWA | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA) |
| Nitric Acid (7697-37-2) | TLV-STEL | USA | 4 ppm STEL | ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL) |
| 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) |
| 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) |
| 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) |
| 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) |
| 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) |
| 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) |
| 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) |

Safety Data Sheet

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|---|---------|-----|---|---|
| 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) | TLV-TWA | USA | 0.2 mg/m ³ TWA | 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) |
| 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) |
| Chromium Nitrate Nonahydrate (7789-1-2) | TWA | USA | "0.5 mg/m ³ TWA (as Cr)" As Chromium(III) compounds [RR-03889-1] | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Chromium Nitrate Nonahydrate (7789-1-2) | TWA | USA | "0.5 mg/m ³ TWA (as Cr)" As Chromium(III) compounds [RR-03889-1] | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Chromium Nitrate Nonahydrate (7789-1-2) | TWA | USA | 0.5 mg/m ³ TWA (as Cr) | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Chromium Nitrate Nonahydrate (7789-1-2) | TWA | USA | "0.5 mg/m ³ TWA (as Cr)" As Chromium(III) compounds [RR-03889-1] | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |
| Chromium Nitrate Nonahydrate (7789-1-2) | TWA | USA | "0.5 mg/m ³ TWA (as Cr)" As Chromium(III) compounds [RR-03889-1] | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs) |

8.2. Exposure Controls

Engineering Controls: Use only outdoors or in a well-ventilated area. No specific controls are needed. Normal room ventilation is adequate.

Respiratory Protection: In case of inadequate ventilation wear 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. In case of inadequate ventilation wear respiratory protection. Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.



Safety Data Sheet

SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Appearance: Colorless to slightly colored 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: 1.04

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.



Safety Data Sheet

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:

Fatal if inhaled. Do not breathe fumes, mist, vapors, or spray. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation wear respiratory protection. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. Specific treatment is urgent (Wash areas of contact with water.). Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Acute Toxicity - Other Information:

LDLo, Oral, Human: 430 mg/kg (Nitric Acid), details of toxic effects not reported other than lethal dose value.

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.

Safety Data Sheet

Aspiration Hazard:

Not applicable.

Additional Toxicology Information:

Data not available.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Toxic to aquatic life. Avoid release to the environment. Dispose of contents in accordance with local, state, federal and international regulations.
Toxic to aquatic life with long lasting effects. Avoid release to the environment. Collect spillage. Dispose of contents in accordance with local, state, federal and international regulations.

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: III

Hazard Label(s):



Safety Data Sheet

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: III

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: III

Hazard Label(s):



SECTION 15: Regulatory Information

15.1. Occupational Safety and Health Administration (OSHA) Hazards

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]

Cadmium (CAS # 7440-43-9): "5 µg/m³ TWA (See 29 CFR 1910.1027, as Cd); 2.5 µg/m³ Action Level (as Cd)" As Cadmium compounds [RR-00559-4]

Cadmium (CAS # 7440-43-9): 5 µg/m³ TWA (See 29 CFR 1910.1027); 2.5 µg/m³ Action Level

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

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

Nitric Acid (CAS # 7697-37-2): 1000 lb TPQ

Safety Data Sheet

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

Antimony Trioxide (CAS # 1309-64-4): 1000 lb final RQ; 454 kg final RQ

Nickel (CAS # 7440-02-0): 100 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); 45.4 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)

Arsenic (CAS # 7440-38-2): 1 lb final RQ; 0.454 kg final RQ

Cadmium (CAS # 7440-43-9): 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)

Copper (CAS # 7440-50-8): 5000 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); 2270 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)

Zinc (CAS # 7440-66-6): 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); 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)

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

Selenium (CAS # 7782-49-2): 100 lb final RQ (no reporting of releases of t

Safety Data Sheet

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

Antimony Trioxide (CAS # 1309-64-4): "1.0 % de minimis concentration (includes any unique chemical substance that contains Antimony as part of that chemical's infrastructure, listed under Chemical Category N010)" As Antimony compounds [RR-00585-6]

Antimony Trioxide (CAS # 1309-64-4): 1.0 % de minimis concentration (includes any unique chemical substance that contains Antimony as part of that chemical's infrastructure, listed under Chemical Category N010)

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

Nickel (CAS # 7440-02-0): "0.1 % de minimis concentration (includes any unique chemical substance that contains Nickel as part of that chemical's infrastructure, listed under Chemical Category N495)" As Nickel compounds [RR-00800-4]

Nickel (CAS # 7440-02-0): 0.1 % 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

Cadmium (CAS # 7440-43-9): "0.1 % de minimis concentration (includes any unique chemical substance that contains Cadmium as part of that chemical's infrastructure, listed under Chemical Category N078)" As Cadmium compounds [RR-00559-4]

Cadmium (CAS # 7440-43-9): 0.1 % de minimis concentration

Cobalt (CAS # 7440-48-4): 0.1 % de minimis concentration

Cobalt (CAS # 7440-48-4): 0.1 % de minimis concentration (includes any unique chemical substance that contains Cobalt as part of that chemical's infrastructure, listed under Chemical Category N096)

Copper (CAS # 7440-50)

15.5. Massachusetts Right-to-Know Substance List

Antimony Trioxide (CAS # 1309-64-4): Present

Nickel (CAS # 7440-02-0): Carcinogen; Extraordinarily hazardous

Tin (CAS # 7440-31-5): Present

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

Cadmium (CAS # 7440-43-9): Carcinogen; Extraordinarily hazardous

Cobalt (CAS # 7440-48-4): Present

Copper (CAS # 7440-50-8): Present

Vanadium (CAS # 7440-62-2): Present (dust and fume)

Zinc (CAS # 7440-66-6): Present

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

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

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

Safety Data Sheet

15.6. Pennsylvania Right-to-Know Hazardous Substances

Antimony Trioxide (CAS # 1309-64-4): "Environmental hazard" As Antimony compounds [RR-00585-6]
Antimony Trioxide (CAS # 1309-64-4): "Present" As Antimony compounds [RR-00585-6]
Antimony Trioxide (CAS # 1309-64-4): Environmental hazard
Antimony Trioxide (CAS # 1309-64-4): Present
Nickel (CAS # 7440-02-0): "Environmental hazard" As Nickel compounds [RR-00800-4]
Nickel (CAS # 7440-02-0): "Present" As Nickel compounds [RR-00800-4]
Nickel (CAS # 7440-02-0): Environmental hazard
Nickel (CAS # 7440-02-0): Environmental hazard; Special hazardous substance
Nickel (CAS # 7440-02-0): Present
Tin (CAS # 7440-31-5): Present
Arsenic (CAS # 7440-38-2): "Environmental hazard" As Arsenic compounds [RR-00625-7]
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)
Cadmium (CAS # 7440-43-9): "Environmental hazard" As Cadmium compounds [RR-00559-4]
Cadmium (CAS # 7440-43-9): "Present" As Cadmium compounds [RR-00559-4]
Cadmium (CAS # 7440-43-9): Environmental hazard (dust; fume; metal; powder); Special hazardous substance (metal; powder)
Cadmium (CAS # 7440-43-9): Present (dust; fume; metal; powder)
Cadmium (CAS # 7440-43-9): Present (metal; powder)
Cobalt (CAS # 7440-48-4): "Environmental hazard" As Cobalt compounds [RR-00107-0]
Cobalt (CAS # 7440-48-4): "Present" As Cobalt compounds [RR-00107-0]
Cobalt (CAS # 7440-48-4): Environmental hazard; Present (fume)
Cobalt (CAS # 7440-48-4): Present
Copper (CAS # 7440-50-8): "Environmental hazard" As Copper compounds [RR-00595-8]
Copper (CAS # 7440-50-8): "Present" As Copper compounds [RR-00595-8]
Copper (CAS # 7440-50-8): Environmental hazard (dust; fume; metal)
Copper (CAS # 7440-50-8): Present (dust; fume; metal)
Vanadium (CAS # 7440-62-2): Environmental hazard (dust; fume)
Vanadium (CAS # 7440-62-2): Present (dust; fume)
Zinc (CAS # 74

Safety Data Sheet

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

Antimony Trioxide (CAS # 1309-64-4): "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 Trioxide (CAS # 1309-64-4): "sn 2223" As Antimony compounds [RR-00585-6]

Antimony Trioxide (CAS # 1309-64-4): carcinogen

Antimony Trioxide (CAS # 1309-64-4): sn 0149

Antimony Trioxide (CAS # 1309-64-4): sn 2223

Antimony Trioxide (CAS # 1309-64-4): SN 2223 500 lb TPQ (Category Code N010. Includes any unique chemical substance that contains the named metal as part of that chemical structure)

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

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

Nickel (CAS # 7440-02-0): "carcinogen" As Nickel compounds [RR-00800-4]

Nickel (CAS # 7440-02-0): "SN 2366 500 lb TPQ (Category Code N495. Includes any unique chemical substance that contains the named metal as part of that chemical structure)" As Nickel compounds [RR-00800-4]

Nickel (CAS # 7440-02-0): "sn 2366" As Nickel compounds [RR-00800-4]

Nickel (CAS # 7440-02-0): carcinogen

Nickel (CAS # 7440-02-0): sn 1341

Nickel (CAS # 7440-02-0): SN 1341 500 lb TPQ

Tin (CAS # 7440-31-5): flammable - third degree

Tin (CAS # 7440-31-5): sn 1858

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

Cadmium (CAS # 7440-43-9): "carcinogen" As Cadmium compounds [RR-00559-4]

Cadmium (CAS # 7440-43-9): "SN 2199 500 lb TPQ (Category Code N078. Includes any unique chemical substance that contains the named metal as part of that chemical structure)" As Cadmium compounds [RR-00559-4]

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Safety Data Sheet

15.8. California Proposition 65

Antimony Trioxide (CAS # 1309-64-4): carcinogen, 10/1/1990
Nickel (CAS # 7440-02-0): "carcinogen, 5/7/2004" As Nickel compounds [RR-00800-4]
Nickel (CAS # 7440-02-0): carcinogen, 10/1/1989 (metallic)
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)
Cadmium (CAS # 7440-43-9): "carcinogen, 10/1/1987" As Cadmium compounds [RR-00559-4]
Cadmium (CAS # 7440-43-9): 0.05 µg/day NSRL (inhalation)
Cadmium (CAS # 7440-43-9): carcinogen, 10/1/1987
Cadmium (CAS # 7440-43-9): developmental toxicity, 5/1/1997
Cadmium (CAS # 7440-43-9): male reproductive toxicity, 5/1/97
Cobalt (CAS # 7440-48-4): carcinogen, 7/1/1992 (powder)

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

Antimony Trioxide (CAS # 1309-64-4): Present (DSL)
Ammonium Hexafluorotitanate (CAS # 16962-40-6): Present (NDSL)
Nickel (CAS # 7440-02-0): Present (DSL)
Tin (CAS # 7440-31-5): Present (DSL)
Arsenic (CAS # 7440-38-2): Present (DSL)
Cadmium (CAS # 7440-43-9): Present (DSL)
Cobalt (CAS # 7440-48-4): Present (DSL)
Copper (CAS # 7440-50-8): Present (DSL)
Vanadium (CAS # 7440-62-2): Present (DSL)
Zinc (CAS # 7440-66-6): Present (DSL)
Hydrofluoric Acid (CAS # 7664-39-3): Present (DSL)
Nitric Acid (CAS # 7697-37-2): Present (DSL)
Water (CAS # 7732-18-5): Present (DSL)
Selenium (CAS # 7782-49-2): Present (DSL)
Chromium Nitrate Nonahydrate (CAS # 7789-02-8): 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.

Safety Data Sheet

Antimony Trioxide (CAS # 1309-64-4): Present (ACTIVE)
Ammonium Hexafluorotitanate (CAS # 16962-40-6): Present (ACTIVE)
Nickel (CAS # 7440-02-0): Present (ACTIVE)
Tin (CAS # 7440-31-5): Present (ACTIVE)
Arsenic (CAS # 7440-38-2): Present (ACTIVE)
Cadmium (CAS # 7440-43-9): Present (ACTIVE)
Cobalt (CAS # 7440-48-4): Present (ACTIVE)
Copper (CAS # 7440-50-8): Present (ACTIVE)
Vanadium (CAS # 7440-62-2): Present (ACTIVE)
Zinc (CAS # 7440-66-6): Present (ACTIVE)
Hydrofluoric Acid (CAS # 7664-39-3): Present (ACTIVE)
Nitric Acid (CAS # 7697-37-2): Present (ACTIVE)
Water (CAS # 7732-18-5): Present (ACTIVE)
Selenium (CAS # 7782-49-2): Present (ACTIVE)
Chromium Nitrate Nonahydrate (CAS # 7789-02-8): Present (ACTIVE)

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

Antimony Trioxide (CAS # 1309-64-4): 215-175-0
Antimony Trioxide (CAS # 1309-64-4): 215-474-6
Ammonium Hexafluorotitanate (CAS # 16962-40-6): 241-036-9
Nickel (CAS # 7440-02-0): 231-111-4
Tin (CAS # 7440-31-5): 231-141-8
Arsenic (CAS # 7440-38-2): 231-148-6
Cadmium (CAS # 7440-43-9): 231-152-8
Cobalt (CAS # 7440-48-4): 231-158-0
Copper (CAS # 7440-50-8): 231-159-6
Vanadium (CAS # 7440-62-2): 231-171-1
Zinc (CAS # 7440-66-6): 231-175-3
Hydrofluoric Acid (CAS # 7664-39-3): 231-634-8
Nitric Acid (CAS # 7697-37-2): 231-714-2
Water (CAS # 7732-18-5): 231-791-2
Selenium (CAS # 7782-49-2): 231-957-4
Chromium Nitrate Nonahydrate (CAS # 7789-02-8): 236-921-1

Safety Data Sheet

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. Fatal if inhaled. Toxic to aquatic life with long lasting effects.

Keep only in original container. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory 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 is urgent (Wash areas of contact with water.). Wash contaminated clothing before reuse. Absorb spillage to prevent material damage. Collect spillage.

Store in a well-ventilated place. Keep container tightly closed. 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.

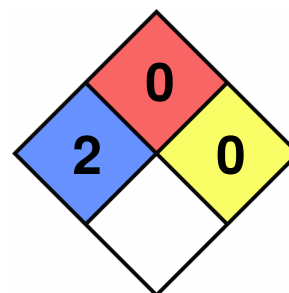
Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.

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: 2023-10-11

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.