



## Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS)

### SECTION 1: Identification

#### 1.1. Product Identifier

**Trade Name or Designation:** Chromium ICP Standard, 100 ppm Cr in dilute HNO<sub>3</sub>

**Product Number:** RPCR01KN

**Other Identifying Product Numbers:** RPCR01KN-100N

#### 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 2 | H319              | P264, P280, P305+P351+P338, P337+P313   |
| 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.         |
| H319          | Causes serious eye irritation.                   |
| 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 immediately).   |
| P321                 | Specific treatment (Wash areas of contact with water immediately).   |
| P337+P313            | If eye irritation persists: Get medical attention.   |
| 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.

## SECTION 3: Composition / Information on Ingredients

### 3.1. Components of Substance or Mixture

| Chemical Name                | Formula  | Molecular Weight | CAS Number | Weight% |
|------------------------------|--|------------------|------------|---------|
| Water                        | H <sub>2</sub> O                                     | 18.01 g/mol      | 7732-18-5  | 97.01   |
| Nitric Acid                  | HNO <sub>3</sub>                                     | 63.01 g/mol      | 7697-37-2  | 2.91    |
| Chromium Nitrate Nonahydrate | Cr(NO <sub>3</sub> ) <sub>3</sub> ·9H <sub>2</sub> O | 238.01 g/mol     | 7789-02-8  | < 0.1   |



## Safety Data Sheet

### 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 irritation. Fatal if inhaled.

#### 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 immediately). 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.

### 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

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.

## Safety Data Sheet

### SECTION 8: Exposure Controls / Personal Protection

#### 8.1 Control Parameters

| Chemical Name                            | Limit Type | Country | Exposure Limit  | Information Source   |
|--|------------|---------|---|--|
| Nitric Acid (7697-37-2)                  | TWA        | USA     | 2 ppm TWA; 5 mg/m <sup>3</sup> TWA  | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |
| Nitric Acid (7697-37-2)                  | 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) |
| Chromium Nitrate Nonahydrate (7789-1 TWA |            | USA     | "0.5 mg/m <sup>3</sup> TWA (as Cr)" As Chromium(III) compounds [RR-03889-1] | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |
| Chromium Nitrate Nonahydrate (7789-1 TWA |            | USA     | "0.5 mg/m <sup>3</sup> TWA (as Cr)" As Chromium(III) compounds [RR-03889-1] | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |
| Chromium Nitrate Nonahydrate (7789-1 TWA |            | USA     | 0.5 mg/m <sup>3</sup> TWA (as Cr)   | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |
| Chromium Nitrate Nonahydrate (7789-1 TWA |            | USA     | "0.5 mg/m <sup>3</sup> TWA (as Cr)" As Chromium(III) compounds [RR-03889-1] | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |
| Chromium Nitrate Nonahydrate (7789-1 TWA |            | USA     | "0.5 mg/m <sup>3</sup> 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.

**Respiratory Protection:** In case of inadequate ventilation wear respiratory protection.

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

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

#### 8.3. Personal Protective Equipment

Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection.



## Safety Data Sheet

### SECTION 9: Physical and Chemical Properties

#### 9.1. Basic Physical and Chemical Properties

**Appearance:** Colorless to light blue liquid

**Physical State:** Liquid

**Odor:** Data not available.

**Odor Threshold:** Data not available.

**pH:** Data not available.

**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:** 1.02

**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.

#### 10.4. Hazardous Decomposition Products

May emit irritating fumes when heated to decomposition.

# 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 immediately). 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:**

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 irritation. Wash arms, hands and face thoroughly after handling. 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. If eye irritation persists: Get medical attention.

**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.



## Safety Data Sheet

**Specific Target Organ Toxicity from Repeated Exposure:**

Not applicable.

**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.



# Safety Data Sheet

## 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):**



### 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):**



## Safety Data Sheet

### 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

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

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

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

Nitric Acid (CAS # 7697-37-2): 1000 lb final RQ; 454 kg final RQ

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

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

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): "1.0 % de minimis concentration (includes any unique chemical substance that contains Chromium as part of that chemical's infrastructure except for Chromite ore mined in the Transvaal Region of South Africa and the unreacted ore component of the Chromite ore processing residue (COPR), no de minimis concentration has been assigned to this chemical category, listed under Chemical Category N090)" As Chromium(III) compounds [RR-03889-1]

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): "1.0 % de minimis concentration (reportable only when in aqueous solution, listed under Chemical Category N511)" As Nitrate compounds, water dissociable [RR-03804-0];

"1.0 % de minimis concentration (includes any unique chemical substance that contains Chromium as part of that chemical's infrastructure except for Chromite ore mined in the Transvaal Region of South Africa and the unreacted ore component of the Chromite ore processing residue (COPR), no de minimis concentration has been assigned to this chemical category, listed under Chemical Category N090)" As Chromium(III) compounds [RR-03889-1]

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): 1.0 % de minimis concentration (includes any unique chemical substance that contains Chromium as part of that chemical's infrastructure except for Chromite ore mined in the Transvaal Region of South Africa and the unreacted ore component of the Chromite ore processing residue (COPR), no de minimis concentration has been assigned to this chemical category, listed under Chemical Category N090)

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): 1.0 % de minimis concentration (reportable only when in aqueous solution, listed under Chemical Category N511)

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

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

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

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

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): "Environmental hazard" As Chromium compounds [RR-00634-8]

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): "Present" As Chromium compounds [RR-00634-8]

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): Environmental hazard

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): Present

## Safety Data Sheet

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

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

Nitric Acid (CAS # 7697-37-2): sn 3722

Nitric Acid (CAS # 7697-37-2): SN 3722 500 lb TPQ (water dissociable, Category Code N511)

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): "SN 2245 500 lb TPQ (Category Code N090. Includes any unique chemical substance that contains the named metal as part of that chemical structure)" As Chromium compounds [RR-00634-8]

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): "SN 2245 500 lb TPQ (Category Code N090. Includes any unique chemical substance that contains the named metal as part of that chemical structure)" As Chromium compounds [RR-00634-8];

"SN 3722 500 lb TPQ (water dissociable, Category Code N511)" As Nitrate compounds [RR-01770-9]

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): "sn 2245" As Chromium compounds [RR-00634-8]

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): "sn 2245" As Chromium compounds [RR-00634-8];

"sn 2870" As Chromium(III) compounds [RR-03889-1]

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): "sn 2245" As Chromium compounds [RR-00634-8];

"sn 3722" As Nitrate compounds [RR-01770-9];

"sn 2870" As Chromium(III) compounds [RR-03889-1]

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): "SN 3722 500 lb TPQ (water dissociable, Category Code N511)" As Nitrate compounds [RR-01770-9]

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): "sn 3722" As Nitrate compounds [RR-01770-9]

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): sn 0435

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): sn 2245

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): SN 2245 500 lb TPQ (Category Code N090. Includes any unique chemical substance that contains the named metal as part of that chemical structure)

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): sn 2870

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): sn 3722

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): SN 3722 500 lb TPQ (water dis

### 15.8. California Proposition 65

Not listed.

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

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

Water (CAS # 7732-18-5): 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.**

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

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

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): Present (ACTIVE)

## Safety Data Sheet

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

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

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

Chromium Nitrate Nonahydrate (CAS # 7789-02-8): 236-921-1

## 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. Causes serious eye irritation. 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 immediately). If eye irritation persists: Get medical attention. 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.

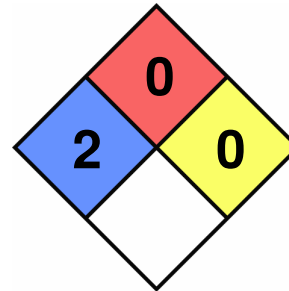
**Biohazardous Infectious Materials Hazard Class:** Not Applicable.



## Safety Data Sheet

### 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.