

Material Safety Data Sheet (MSDS)

Product Name: Chromic Acid Flakes

MSDS Generate Date: 20-05-2017

Revision Date: 30-12-2024

Supplier:

Rawpharma Biz Pvt Ltd

1101- City Centre 2,

Science City Road,

Sola Ahmedabad Gujarat,

India - 380060.

Contact No.: +91 97272 88479

Email: info@rawpharmabiz.com

Website: www.rawpharmabiz.com

1. Identification of the Substance/Preparation and Company

Product Name: Chromic Acid Flakes

Chemical Name: Chromic Acid (CrO_3)

Recommended Use: Industrial use, electroplating, surface treatment, chemical manufacturing.

2. Hazard Identification

- **Classification:**

- Oxidizing Solid (Category 1)
- Acute Toxicity (Category 3)
- Skin Corrosive (Category 1A)
- Eye Damage (Category 1)
- Carcinogenicity (Category 1B)
- Aquatic Chronic Toxicity (Category 1)

- **Signal Word:** DANGER
- **Hazard Statements:**
 - May cause fire or explosion; strong oxidizer.
 - Toxic if swallowed, inhaled, or absorbed through skin.
 - Causes severe skin burns and eye damage.
 - May cause cancer.
 - Very toxic to aquatic life.
- **Precautionary Statements:**
 - Wear protective equipment.
 - Avoid breathing dust.
 - Keep away from organic materials.

3. Composition / Information on Ingredients

Chemical Name: Chromic Acid (Chromium VI)

CAS Number: 7738-94-5

Purity: ≥ 99%

Synonyms: Chromium Trioxide, Chromic Anhydride

4. First Aid Measures

- **Inhalation:** Move to fresh air, keep warm, seek immediate medical help.
- **Skin Contact:** Rinse with plenty of water for 20 minutes; remove contaminated clothes.
- **Eye Contact:** Flush eyes with running water for at least 20 minutes; seek urgent medical attention.
- **Ingestion:** Do NOT induce vomiting; rinse mouth; seek immediate medical aid.
- **Most Important Symptoms:** Burning, respiratory distress, ulceration, eye damage.

5. Fire Fighting Measures

- **Suitable Extinguishing Media:** Water spray, foam.
 - **Unsuitable Media:** Dry chemicals, CO₂.
 - **Hazards:** Powerful oxidizer; may react violently with combustibles. Releases toxic chromium fumes.
 - **Protective Equipment:** Full protective suit and SCBA.
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6. Accidental Release Measures

- Evacuate area; avoid dust inhalation.
 - Wear full PPE including respirator.
 - Do not allow product to enter drains or water bodies.
 - Sweep up carefully and place in sealed container.
 - Neutralize residues with reducing agents (e.g., sodium bisulfite).
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7. Handling and Storage

- **Handling:**
 - Avoid inhalation, ingestion, and contact with skin/eyes.
 - Use only in well-ventilated areas.
 - Keep away from organic materials and reducing agents.
 - **Storage:**
 - Store in a cool, dry, well-ventilated area.
 - Keep container tightly closed.
 - Store away from combustibles, solvents, and acids.
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8. Exposure Controls / Personal Protection

- **Exposure Limits:**
 - OSHA PEL: 0.005 mg/m³ (Cr VI compounds)
 - ACGIH TLV: 0.003 mg/m³

- **Engineering Controls:** Exhaust ventilation, closed systems.
- **PPE:**
 - Respiratory: Approved respirator for Cr VI dust.
 - Eyes: Chemical goggles + face shield.
 - Skin: Chemical-resistant gloves, apron, full suit.

9. Physical and Chemical Properties

- **Appearance:** Red to dark red flakes
- **Odor:** Odorless
- **Melting Point:** 196°C
- **Boiling Point:** Decomposes
- **Solubility:** Soluble in water
- **pH (1% solution):** Acidic
- **Oxidizing Properties:** Strong oxidizer

10. Stability and Reactivity

- **Stable** under recommended conditions.
- **Incompatible Materials:** Organic matter, reducing agents, alcohols, bases, combustibles, metals.
- **Decomposition Products:** Toxic chromium fumes, oxygen.
- **Hazardous Reactions:** Violent reactions with solvents or flammable materials.

11. Toxicological Information

- **Acute Toxicity:** Highly toxic by ingestion, inhalation, and dermal exposure.
- **Skin Corrosion/Irritation:** Causes severe burns.
- **Carcinogenicity:** Contains Chromium VI—classified as carcinogenic.
- **Chronic Effects:** May damage respiratory tract, liver, kidneys.

12. Ecological Information

- Highly toxic to aquatic organisms.
- Persistent and bioaccumulative.
- Avoid release to environment.

13. Disposal Considerations

- Dispose through licensed chemical waste facility.
- Do not discharge into drains.
- Neutralize Cr VI to Cr III before disposal when allowed.

14. Transport Information (DETAILED)

UN Number: UN 1463

Proper Shipping Name: Chromic Acid, Solid

Transport Hazard Class: Class 5.1 (Oxidizing Substances)

Subsidiary Risk: Class 8 (Corrosive)

Packing Group: PG I (High Danger)

Transport Labels Required:

- Oxidizer (5.1)
- Corrosive (8)

Environmental Hazards:

- Marine Pollutant: **Yes**
- Very toxic to aquatic life; ensure no leakage during transport.

Special Precautions for User:

- Keep away from heat, organic materials, flammable substances, and reducing agents.
- Do not transport with fuels, solvents, paper, or other combustibles.
- Use corrosion-resistant, sealed containers.

- Ensure vehicle is well ventilated and free from contaminants.

Transport Regulations:

- **ADR/RID (Europe):** UN 1463, Oxidizing solid, Corrosive, PG I
- **IMDG (Sea):** UN 1463, Marine Pollutant, Emergency Schedule (EmS): F-A, S-Q
- **IATA (Air):** Forbidden on passenger aircraft; permitted on cargo aircraft only as PG I

15. Regulatory Information

- Classified as hazardous under OSHA, EU REACH, and GHS.
- Carcinogenic substance (Chromium VI).
- Environmental restrictions apply.

16. Other Information

- This MSDS is prepared based on available data and standard safety guidelines.
- Users must ensure suitability for specific applications.
- Handle only under strict safety protocols.
- **MSDS Generate Date:** 20-05-2017
- **Revision Date:** 30-12-2024
- **Website:** www.rawpharmabiz.com
- MSDS are based on the manufacturer's provided information.