

MATERIAL SAFETY DATA SHEET

CHROMIUM NITRATE 98% AR

**Nonahydrate
(Chromium (III) nitrate)
MSDS CAS: 7789-02-8**

Section 1: Chemical Product and Company Identification

Section 1: Chemical Product

Product Name: Chromium Nitrate Nonahydrate AR

CAS#: 7789-02-8

Synonym: Chromium (III) Nitrate, nonahydrate; Nitric
Acid, Chromium (3+) salt, nonahydrate

Chemical Name: Chromium Nitrate, nonahydrate

Chemical Formula: $\text{Cr}(\text{NO}_3)_3 \cdot 9\text{H}_2\text{O}$

Brand : OXFORD

Details Of The Supplier Of The Safety Data Sheet :

Company identification: **OXFORD LAB FINE CHEM LLP**
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Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Chromium Nitrate Nonahydrate AR	7789-02-8	100

Section 2: Composition and Information on Ingredients (Continued)

Toxicological Data on Ingredients: Chromium Nitrate Nonahydrate: ORAL (LD50): Acute: 3250 mg/kg [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects:

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Prolonged exposure may result in skin burns and ulcerations. Over-exposure by inhalation may cause respiratory irritation.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. **MUTAGENIC EFFECTS:** Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact:

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Section 4: First Aid Measures (Continued)

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. Seek medical attention.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: Not applicable.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards:

Contact of combustible materials with Chromium Nitrate, nonahydrate may cause fire. Keep from contact with clothing and other combustible materials.

Special Remarks on Explosion Hazards: Not applicable.

Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill:

Oxidizing material. Stop leak if without risk. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal.

Section 7: Handling and Storage

Precautions:

Keep locked up. Keep away from heat. Keep away from sources of ignition. Danger! Strong Oxidizer! Keep away from combustible material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as combustible materials.

Storage:

Keep container tightly closed. Keep container in a cool, well-ventilated area. Danger! Stronger Oxider! Separate from acids, alkalies, reducing agents and combustibles. See NFPA 43A, Code for the Storage of Liquid and Solid Oxidizers. Do not store above 24°C (75.2°F).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Damp Crystals solid.)

Odor	: nitric acid (Slight.)
Taste	: Not available.
Molecular Weight	: Not available.
Color	: Purple.
pH (1% soln/water)	: Not applicable.
Boiling Point	: Not applicable.
Melting Point	: Not available.
Critical Temperature	: Not available.
Specific Gravity	: 1.85 (Water = 1)
Vapor Pressure	: Not applicable.
Vapor Density	: Not applicable.
Volatility	: Not available.
Odor Threshold	: Not applicable.
Water/Oil Dist. Coeff.	: Not applicable.
Ionicity (in Water)	: Not available.
Dispersion Properties	: See solubility in water.
Solubility	: Soluble in cold water, hot water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials.

Incompatibility with various substances: Highly reactive with combustible materials.

Corrosivity: Not Available.

Special Remarks on Reactivity: Danger! Strong Oxidizer. Incompatible with easily oxidizable materials.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact. Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 3250 mg/kg [Rat].

Chronic Effects on Humans:

MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.

Other Toxic Effects on Humans:

Hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: May affect genetic material (mutagen).

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: May cause irritation or acid burns of the skin. Eyes: May cause irritation or acid burns of the eyes. Inhalation: May cause upper respiratory tract a mucous membrane irritation. May affect respiration. Ingestion: May cause irritation or burns of the mouth, throat and stomach (gastrointestinal tract). May affect liver and urinary system.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation:

The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal :

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

Land transport (ADR-RID)

Proper shipping name: CHROMIUM NITRATE

UN N°: 2720

H.I. nr: 50

ADR - Class: 5.1

Labelling - Transport: 5.1 : Oxidizing substances.

Sea transport (IMDG) [English only]

Proper shipping name: CHROMIUM NITRATE

UN N°: 2720

IMO-IMDG - Class or division: 5.1 : Oxidizing substances.

IMO-IMDG - Packing group: III

Air transport (ICAO-IATA) [English only]

Proper shipping name: CHROMIUM NITRATE

UN N°: 2720

IATA - Class or division: 5.1 : Oxidizing substances.

IATA - Packing group: III

Section 15: Other Regulatory Information

Federal and State Regulations: No products were found.

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Section 15: Other Regulatory Information (Continued)

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC): R8- Contact with combustible material may cause fire. R36/38- Irritating to eyes and skin. R40- Possible risks of irreversible effects. S2- Keep out of the reach of children. S36/37- Wear suitable protective clothing and gloves. S46- If swallowed, seek medical advice immediately and show this container or label.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 0

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves (impervious). Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

Section 16 - Additional Information

References: Not available.

Other Special Considerations: Not available.

Disclaimer:

The information contained herein in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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