

Material Safety Data Sheet



Chromium (III) Nitrate, 9-Hydrate

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Carolina Biological Supply Company

2700 York Rd | Burlington, NC 27215 • to order: 800.334.5551 • for support: 800.227.1150

CAROLINA

www.carolina.com

Section 1 - Product Description

Product Name: Chromium Nitrate, 9-Hydrate

Product Code(s): 85-4420, 84-0910, 85-4470

Size: 454 g, 100 g

Chemical Name: Chromium (III) Nitrate, 9-Hydrate

CAS Number: 7789-02-8

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

Synonyms: Chromic Nitrate, 9-Hydrate

Distributor: Carolina Biological Supply Company, 2700 York Road, Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F) **Chemtrec** 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 - Hazard Identification

Emergency Overview: DANGER - Product is a strong oxidizer. Harmful by inhalation and if swallowed. Causes burns.

Potential Health Effects:

Eyes: Causes severe burns and eye damage upon direct contact. Vapor is irritating.

Skin: May cause severe irritation or chemical burns.

Ingestion: May severely irritate or damage digestive tract.

Inhalation: May severely irritate or damage mucous membranes and respiratory tract.

Section 3 - Composition / Information on Ingredients

Principal Hazardous Components: Chromium (III) Nitrate, 9-Hydrate (CAS # 7789-02-8) 99%

TLV units: ACGIH-TLV 0.5 mg(CrVI)/m³ (TWA)

PEL units: OSHA-PEL 1 mg(CrVI)/m³ (TWA)

Section 4 - First Aid Measures

Emergency and First Aid Procedures:

Eyes - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin - After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.

Ingestion - If swallowed, if conscious, give plenty of water and induce vomiting immediately as directed by medical personnel. Immediately call a physician or poison control center. Never give anything by mouth to an unconscious person.

Inhalation - In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Section 5 - Firefighting Procedures

Flash Point (Method Used): N/A

NFPA Rating:

Health: 3

Fire: 0

Reactivity: 1

Extinguisher Media: Use media suitable to extinguish surrounding fire.

Flammable Limits in Air % by Volume: N/A

Autoignition Temperature: N/A

Special Firefighting Procedures: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Contact with combustible materials, flammable materials, or powdered metals can cause fire or explosion. Can react violently with reducing agents.

Product is a strong oxidizer.

Risk of explosion by shock, friction, fire or other sources of ignition.

Section 6 - Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: Ventilate area of spill. Clean-up personnel should wear proper protective equipment. Avoid creating dust. Sweep or scoop up and containerize for disposal.

Section 7 - Special Precautions

Precautions to Take in Handling or Storing: Avoid contact with skin and eyes.

Avoid contact with clothing.

Store separately and away from flammable and combustible materials. Keep container tightly closed in a cool, well-ventilated place.

Store in a secure area suitable for oxidizing agents. Store away from flammable materials, organic solvents and combustible materials.

Section 8 - Protection Information

Respiratory Protection (Specify Type): None needed under normal conditions of use with adequate ventilation. A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

Ventilation:

Local Exhaust: Yes

Mechanical(General): Yes

Special: No

Other: No

Protective Gloves: Natural rubber, Neoprene, PVC or equivalent.

Eye Protection: Splash proof chemical safety goggles should be worn.

Other Protective Clothing or Equipment: Lab coat, apron, eye wash, safety shower.

Section 9 - Physical Data

Molecular Weight: 400.15

Boiling Point: 100 °C

Vapor Density(Air=1): N/A

Percent Volatile by Volume: 0%

Solubility in Water: Slightly Soluble

Melting Point: 60 °C

Vapor Pressure: N/A

Specific Gravity (H2O=1): 1.85

Evaporation Rate (BuAc=1): N/A

Appearance and Odor: Purple Crystals; odorless

Section 10 - Reactivity Data

Stability: Stable

Conditions to Avoid: Heat and sources of ignition.

Avoid dusting.

Incompatibility (Materials to Avoid): Organics, Metals, Reducing agents,
Hazardous Decomposition Products: NO_x,
Hazardous Polymerization: Will not occur

Section 11 - Toxicity Data

Toxicity Data: orl-rat LD50 3250 mg/kg

Effects of Overexposure:

Acute: See Section 2

Chronic: Certain components or species of this product are considered potential carcinogens. Mutation data cited.

Conditions Aggravated by Overexposure: N/A

Target Organs: Skin,

Primary Route(s) of Entry: Inhalation, ingestion, eye or skin contact.

Section 12 - Ecological Data

EPA Waste Numbers: D007

Section 13 - Disposal Information

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

Section 14 - Transport Information

DOT Proper Shipping Name: UN2720

Chromium Nitrate

Division 5.1

P.G. III

Section 15 - Regulatory Information

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Acute

Name List:

Chromium Nitrate, 9-Hydrate - Yes

Chemical Category:

Chromium Nitrate, 9-Hydrate - No

CERCLA Section 103 RQ(lb.): Chromium Nitrate, 9-Hydrate - Yes (No RQ)

RCRA Section 261.33: Chromium Nitrate, 9-Hydrate - No

Section 16 - Additional Information

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH American Conference of Governmental Industrial Hygienists

CAS Number Chemical Services Abstract Number

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

DOT U.S. Department of Transportation

IARC International Agency of Research on Cancer

N/A Not Available

NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
ppm	Parts per million
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act