

# CHROMIUM(III) NITRATE NONAHYDRATE

1530

October 2004

CAS No: 7789-02-8  
RTECS No: GB6300000  
UN No: 2720

Chromic nitrate  
Chromium trinitrate  
Nitric acid, chromium(III) salt  
 $\text{Cr}(\text{NO}_3)_3 \cdot 9\text{H}_2\text{O}$   
Molecular mass: 400.2

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
<b>FIRE</b>	Not combustible but enhances combustion of other substances. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames.	In case of fire in the surroundings: use appropriate extinguishing media.
<b>EXPLOSION</b>	Risk of fire and explosion.		
<b>EXPOSURE</b>		<b>STRICT HYGIENE!</b>	
<b>Inhalation</b>	Cough. Sore throat.	Local exhaust or breathing protection.	Fresh air, rest.
<b>Skin</b>		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
<b>Eyes</b>		Safety goggles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
<b>Ingestion</b>	Abdominal pain. Diarrhoea. Nausea. Vomiting.	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Refer for medical attention.

**SPILLAGE DISPOSAL**

Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Personal protection: P2 filter respirator for harmful particles. Do NOT let this chemical enter the environment.

**PACKAGING & LABELLING**

**UN classification**  
UN Hazard Class: 5.1  
UN Pack Group: III

**EMERGENCY RESPONSE**

Transport Emergency Card: TEC (R)-51G02-I+II+III

**SAFE STORAGE**

Separated from combustible and reducing substances.

**IPCS**

International  
Programme on  
Chemical Safety



Prepared in the context of cooperation between the International Programme on Chemical Safety and the European Commission ©  
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SEE IMPORTANT INFORMATION ON THE BACK.

## IMPORTANT DATA

**Physical State; Appearance**

DEEP VIOLET CRYSTALS

**Chemical dangers**

The substance is a strong oxidant and reacts with combustible and reducing materials. The solution in water is a weak acid.

**Occupational exposure limits**TLV: (as Cr metal, Cr(III) compounds) 0.5 mg/m<sup>3</sup> as TWA; A4 (not classifiable as a human carcinogen); (ACGIH 2004).

MAK not established.

**Inhalation risk**

A harmful concentration of airborne particles can be reached quickly when dispersed.

**Effects of short-term exposure**

The substance is irritating to the respiratory tract.

**Effects of long-term or repeated exposure**

Repeated or prolonged contact may cause skin sensitization.

## PHYSICAL PROPERTIES

Decomposes below boiling point

Melting point: 66/C

Density: 1.8 g/cm<sup>3</sup>

Solubility in water: very good

## ENVIRONMENTAL DATA

The substance is toxic to aquatic organisms.

## NOTES

Do NOT take working clothes home.

The recommendations on this Card also apply to Chromium(III) nitrate anhydrous.

## ADDITIONAL INFORMATION

## LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information