

# CHROMIUM

0029

October 2004

CAS No: 7440-47-3  
RTECS No: GB4200000

Chrome  
(powder)  
Cr  
Atomic mass: 52.0

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
<b>FIRE</b>	Combustible under specific conditions.	No open flames if in powder form.	In case of fire in the surroundings: use appropriate extinguishing media.
<b>EXPLOSION</b>		Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	

EXPOSURE		PREVENT DISPERSION OF DUST!	
<b>Inhalation</b>	Cough.	Local exhaust or breathing protection.	Fresh air, rest.
<b>Skin</b>		Protective gloves.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
<b>Eyes</b>	Redness.	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>		Do not eat, drink, or smoke during work.	Rinse mouth.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Personal protection: P2 filter respirator for harmful particles.	

EMERGENCY RESPONSE	SAFE STORAGE

## IMPORTANT DATA

**Physical State; Appearance**

GREY POWDER

**Physical dangers**

Dust explosion possible if in powder or granular form, mixed with air.

**Chemical dangers**

Chromium is a catalytic substance and may cause reaction in contact with many organic and inorganic substances, causing fire and explosion hazard.

**Occupational exposure limits**TLV: (as Cr metal, Cr(III) compounds) 0.5 mg/m<sup>3</sup> as TWA; A4; (ACGIH 2004).

MAK not established.

**Inhalation risk**

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

**Effects of short-term exposure**

May cause mechanical irritation to the eyes and the respiratory tract.

## PHYSICAL PROPERTIES

Boiling point: 2642/C  
Melting point: 1900/CDensity: 7.15 g/cm<sup>3</sup>  
Solubility in water: none

## ENVIRONMENTAL DATA

## NOTES

The surface of the chromium particles is oxidized to chromium(III)oxide in air.  
See ICSC 1531 Chromium(III) oxide.

## ADDITIONAL INFORMATION

## LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible