



# Material Safety Data Sheet

## HAZARDOUS

Catalog Number: **208841**

Revision date: 10-Mar-2005

Australia Hazardous Statement: **Hazardous according to criteria of NOHSC**

### 1. COMPANY DETAILS

**Supplier:** MP Biomedicals Australasia Pty Limited  
Unit 12, 167 Prospect Hwy.  
Seven Hills, NSW 2147 Aust.

**Telephone Number:** (02) 9838 7422  
**Fax Number:** (02) 9838 7390

**Emergency telephone number:** (02) 9838 7422: hours: 8.30 AM to 5.00 PM

**Australian Business Number (ABN):** 31 106 467 109

### 2. IDENTIFICATION

**Product name:** CHROMIUM CARBONYL  
**Catalog Number:** 208841  
**Synonyms:** Chromium Hexacarbonyl; Hexacarbonyl chromium

**UN/Id No:** 2811  
**Proper shipping name:** Toxic solid, organic, n.o.s.  
**IATA Hazard Label(s):** Toxic  
**Hazard Class:** 6.1  
- Toxic substances - oral  
**Subsidiary risk:** No Subsidiary Risk allocated  
**Packing group:** II

**Emergency Action Code (Hazchem code):** 2XE  
**Poisons schedule No. (Aust)/Toxic Substance (NZ):** S5 Caution. S6 Poison.  
**Recommended use:** Research product for non-human use

**Component** **Australia (AICS):**  
CHROMIUM CARBONYL Present  
13007-92-6 (100)

### 3. PHYSICAL DESCRIPTION/PROPERTIES

**Appearance and Odor:** Steel-grey, lustrous metal; odorless; available as lumps, granules, powder or high purity single crystals.

**Physical state:** Solid  
**Formula:** C6CrO6  
**Molecular weight:** 52  
**Boiling point/range:** 2642 °C (4788 °F)  
**Melting point/range:** 1900 °C (3452 °F)  
**Density:** 7.2 (water = 1)

<b>Vapor pressure:</b>	Practically zero at room temperature 1 mm Hg at 1616 °C
<b>Solubility (in water):</b>	Insoluble
<b>Flash point:</b>	Not determined
<b>Autoignition temperature:</b>	Not determined
<b>Flammable limits in air - lower (%):</b>	Not determined
<b>Flammable limits in air - upper (%):</b>	Not determined

#### 4. INGREDIENTS

Components	CAS Number	Weight %	EC No.	Classification
CHROMIUM CARBONYL	13007-92-6	100	235-852-4	Xn; T

#### 5. HAZARDS IDENTIFICATION

**Australia Hazardous Statement:** Hazardous according to criteria of NOHSC



**Indication of Danger:**

Xn - Harmful.  
T - Toxic.

R40/22 - Harmful: possible risk of irreversible effects if swallowed.

**Safety Phrases:**

S28 - After contact with skin, wash immediately with plenty of water.  
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).  
S53 - Avoid exposure - obtain special instructions before use.  
  
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

**Category of Danger:** Harmful , Toxic , Carc. cat. 3

**Poisons schedule No. (Aust)/Toxic Substance (NZ):** S5 Caution. S6 Poison.

#### 6. HEALTH HAZARD INFORMATION

##### HEALTH EFFECTS

**EMERGENCY OVERVIEW:**

Toxic: danger of very serious irreversible effects if swallowed. May also have serious irreversible effects through skin contact or inhalation.

**Principle routes of exposure:**

Skin

**Inhalation:**

Harmful: possible risk of irreversible effects through inhalation.

**Ingestion:**

Toxic: danger of very serious irreversible effects if swallowed.

**Skin contact:**

Harmful: danger of serious damage to health by prolonged skin contact.

**Eye contact:**

Risk of serious damage to eyes

**Statements of hazard**

Toxic if swallowed

Components	<b>Australian Exposure Standards - Carcinogens</b>	<b>Australia - Exposure Standards - Short</b>
CHROMIUM CARBONYL	Not Listed	Not Listed

Components	<b>Australia - Exposure Standards - Skin E</b>	<b>Australia - Exposure Standards - Time W</b>
CHROMIUM CARBONYL	Not Listed	0.5 mg/m <sup>3</sup> TWA

## FIRST AID

<b>General advice:</b>	In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
<b>Inhalation:</b>	Move to fresh air. Call a physician immediately.
<b>Skin contact:</b>	Rinse immediately with plenty of water and seek medical advice
<b>Ingestion:</b>	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician Drink 1 or 2 glasses of water. Induce vomiting if person is conscious.
<b>Eye contact:</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
<b>Protection of first-aiders:</b>	No information available
<b>Notes to physician:</b>	None
<b>Medical conditions aggravated by exposure:</b>	None known

## 7. PRECAUTIONS FOR USE

**Section 8 Notes:** TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life. According to current knowledge this concentration should neither impair the health or, not cause undue discomfort to, nearly all workers.

**Engineering measures:** Ensure adequate ventilation, especially in confined areas.

## PERSONAL PROTECTIVE EQUIPMENT

**Respiratory protection:** Self-contained breathing apparatus

**Hand protection:** Pvc disposable gloves

**Skin and body protection:** Impervious clothing Long sleeved clothing

**Eye protection:** Safety glasses

**Hygiene measures:** Avoid contact with skin, eyes and clothing.



## 8. SAFE HANDLING INFORMATION

### Storage:

ROOM TEMPERATURE

### Handling:

#### Safe handling advice:

Use only in area provided with appropriate exhaust ventilation.

Wear personal protective equipment. Remove and wash contaminated clothing before reuse.

#### Technical measures/storage conditions:

Keep containers tightly closed in a cool, well-ventilated place. Keep container tightly closed in a dry and well-ventilated place.

<b>Stability:</b>	Stable under recommended storage conditions.
<b>Polymerization:</b>	None under normal processing.
<b>Hazardous decomposition products:</b>	Chromium (Cr-)
<b>Materials to avoid:</b>	-
<b>Conditions to avoid:</b>	Exposure to air or moisture over prolonged periods.

**Spills and Disposal:**

<b>Personal precautions:</b>	Use personal protective equipment.
<b>Environmental precautions:</b>	Prevent product from entering drains.
<b>Methods for cleaning up:</b>	Sweep up and shovel into suitable containers for disposal.
<b>Waste from residues / unused products:</b>	Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.
<b>Contaminated packaging:</b>	Do not re-use empty containers

**Fire/Explosion Hazards:**

<b>Suitable extinguishing media:</b>	Use media appropriate for the surrounding fire. Do not use carbon dioxide.
<b>Specific hazards:</b>	Slight flammability. May explode when heated above 210°C
<b>Unusual hazards:</b>	None known
<b>Special protective equipment for firefighters:</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear
<b>Specific methods:</b>	Water mist may be used to cool closed containers.

**9. TOXICOLOGICAL INFORMATION****Product Information****Acute toxicity**

Components	RTECS Number:	Selected LD50s and LC50s
CHROMIUM CARBONYL	GB5075000	Oral LD50 Rat : 230 mg/kg Oral LD50 Mouse : 150 mg/kg

<b>Chronic toxicity:</b>	Chronic exposure may cause nausea and vomiting, higher exposure causes unconsciousness.
<b>Local effects:</b>	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
<b>Specific effects:</b>	May include moderate to severe erythema (redness) and moderate edema (raised skin), nausea, vomiting, headache.
<b>Carcinogenic effects:</b>	Possible carcinogen
<b>Mutagenic effects:</b>	No data is available on the product itself.
<b>Reproductive toxicity:</b>	No data is available on the product itself.

Components	NIOSH - Health Effects	NIOSH - Target Organs
CHROMIUM CARBONYL	Pulmonary effects	respiratory system, skin, eyes

**10. ECOLOGICAL INFORMATION**

<b>Mobility:</b>	No data available
<b>Bioaccumulation:</b>	No data available

**Ecotoxicity effects:** No data available  
**Aquatic toxicity:** May cause long-term adverse effects in the aquatic environment.

<b>Components</b>	<b>U.S. DOT - Appendix B - Marine Pollutan</b>	<b>U.S. DOT - Appendix B - Severe Marine Pollutants</b>	<b>United Kingdom - The Red List:</b>
CHROMIUM CARBONYL	Not Listed	Not Listed	Not Listed

<b>Components</b>	<b>Germany VCI (WGK)</b>	<b>World Health Organization (WHO) - Drinking Water</b>	<b>Ecotoxicity - Fish Species Data</b>
CHROMIUM CARBONYL	Not Listed	0.05 mg/L (Provisional)	Not Listed

<b>Components</b>	<b>Ecotoxicity - Freshwater Algae Data</b>	<b>Ecotoxicity - Microtox Data</b>	<b>Ecotoxicity - Water Flea Data</b>
CHROMIUM CARBONYL	Not Listed	Not Listed	Not Listed

<b>Components</b>	<b>EPA - ATSDR Priority List</b>	<b>EPA - HPV Challenge Program Chemical List</b>	<b>California - Priority Toxic Pollutants</b>
CHROMIUM CARBONYL	Rank (of 275): 073	Not Listed	Not Listed

<b>Components</b>	<b>California - Priority Toxic Pollutants</b>	<b>California - Priority Toxic Pollutants</b>
CHROMIUM CARBONYL	Not Listed	Not Listed

## 11. TRANSPORT INFORMATION

### IMDG/IMO

**Proper shipping name:** Toxic solid, organic, n.o.s.  
**IMDG - Hazard Classifications** Not Applicable  
**IMDG - Marine Pollutants** Not Applicable  
**IMDG - Marine Pollutants** Not Applicable  
**IMDG - Regulated Substances** Not Applicable  
**IMDG - Severe Marine Pollutants** Not Applicable

### IMO-labels:

**Packing group:** II  
**Proper shipping name:** Toxic solid, organic, n.o.s.  
**UN/Id No:** 2811

### ADR/RID

**Australia Hazardous Statement:** Hazardous according to criteria of NOHSC  
**Hazard Class** 6.1  
**Item:** CHROMIUM CARBONYL  
**ADR/RID-labels:** Toxic  
**UN/Id No:** 2811  
**Emergency Action Code (Hazchem code):** 2XE  
**Proper shipping name:** Toxic solid, organic, n.o.s.

### ICAO:

**Hazard Class** 6.1  
**Packing group:** II  
**Proper shipping name:** Toxic solid, organic, n.o.s.

## 12. REGULATORY INFORMATION

### International inventories:

CHROMIUM CARBONYL

<b>Australia (AICS):</b>	Present
<b>Inventory - China:</b>	Present
<b>EU EINECS List -</b>	235-852-4; C6CrO6
<b>Korean KECL:</b>	KE-05990
<b>Philippines PICCS:</b>	Present

**Indication of Danger:**  
Xn - Harmful.  
T - Toxic.



### **Risk Combination Phrases**

R40/22 - Harmful: possible risk of irreversible effects if swallowed.

**Safety Phrases:** S28 - After contact with skin, wash immediately with plenty of water.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

S53 - Avoid exposure - obtain special instructions before use.

### **Safety Combination Phrases:**

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

**Poisons schedule No. (Aust)/Toxic Substance (NZ):** S5 Caution. S6 Poison.

## 13. OTHER INFORMATION

**Prepared by:** Health & Safety

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**End of Safety Data Sheet**