



# Material Safety Data Sheet

## HAZARDOUS

**Catalog Number: 206685**

**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:** CALCIUM PERMANGANATE  
**Catalog Number:** 206685  
**Synonyms:** Not Available

**UN/Id No:** 1482  
**Proper shipping name:** Permanganates, inorganic, n.o.s.  
**IATA Hazard Label(s):** Oxidizer  
**Hazard Class:** 5.1  
**-** Oxidizers  
**Subsidiary risk:** No Subsidiary Risk allocated  
**Packing group:** II

**Emergency Action Code (Hazchem code):** 1Y  
**Poisons schedule No. (Aust)/Toxic Substance (NZ):** No Poisons Schedule Number allocated  
**Recommended use:** Research product for non-human use

|                      |                          |
|----------------------|--------------------------|
| <b>Component</b>     | <b>Australia (AICS):</b> |
| CALCIUM PERMANGANATE | Not Present              |
| N/A (100)            |                          |

### 3. PHYSICAL DESCRIPTION/PROPERTIES

**Physical state:** Solid  
**Formula:**  $\text{Ca}(\text{MnO}_4)_2 \cdot 5\text{H}_2\text{O}$   
**Boiling point/range:** Not determined  
**Melting point/range:** decomposes  
**Density:** 2.4 g/ml  
**Vapor pressure:** Not determined  
**Solubility (in water):** Soluble  
**Flash point:** Not determined  
**Autoignition temperature:** Not determined

Flammable limits in air - lower (%) : Not determined  
 Flammable limits in air - upper (%) : Not determined

#### 4. INGREDIENTS

| Components           | CAS Number | Weight % | EC No. | Classification |
|----------------------|------------|----------|--------|----------------|
| CALCIUM PERMANGANATE | N/A        | 100      | --     | O              |

#### 5. HAZARDS IDENTIFICATION

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



**Indication of Danger:**  
 O - Oxidizing.

**Risk Phrases:**

R 9 - Explosive when mixed with combustible material.  
 R18 - In use, may form flammable vapour-air mixture.

**Safety Phrases:**

S13 - Keep away from food, drink and animal feeding stuffs.  
 S27 - Take off immediately all contaminated clothing.  
 S16 - Keep away from sources of ignition - No smoking.

**Category of Danger:** Oxidizer

**Poisons schedule No. (Aust)/Toxic Substance (NZ):** No Poisons Schedule Number allocated

#### 6. HEALTH HAZARD INFORMATION

##### HEALTH EFFECTS

**EMERGENCY OVERVIEW:** Contact with combustible material may cause fire  
**Principle routes of exposure:** Skin  
**Inhalation:** May cause irritation of respiratory tract  
**Ingestion:** May be harmful if swallowed.  
**Skin contact:** May cause allergic skin reaction  
**Eye contact:** Avoid contact with eyes  
**Statements of hazard** May cause fires.

| Components           | Australian Exposure Standards - Carcinogens | Australia - Exposure Standards - Short |
|----------------------|---|--|
| CALCIUM PERMANGANATE | Not Listed                                  | Not Listed                             |

| Components           | Australia - Exposure Standards - Skin E | Australia - Exposure Standards - Time W |
|----------------------|---|---|
| CALCIUM PERMANGANATE | Not Listed                              | Not Listed                              |

**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.  |
| <b>Eye contact:</b>                               | In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.               |
| <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:** In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

**Hand protection:** Pvc disposable gloves

**Skin and body protection:** Impervious clothing

**Eye protection:** If splashes are likely to occur, wear: Safety glasses with side-shields

**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 container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition For safety reasons in case of fire, cans should be stored separately in closed containments. Do not expose material to high temperatures, changes in pressure or sudden shock. Keep away from contact with clothing and other combustible materials.

**Stability:**

Stable under recommended storage conditions.

**Polymerization:**

None under normal processing.

**Hazardous decomposition products:**

Thermal decomposition can lead to release of irritating gases and vapours such as carbon oxides.

**Materials to avoid:**

Strong oxidising agents

**Conditions to avoid:**

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 dry chemical, CO2, water spray or `alcohol` foam.   |
| <b>Specific hazards:</b>                              | Burning produces irritant fumes.  |
| <b>Unusual hazards:</b>                               | None known  |
| <b>Special protective equipment for firefighters:</b> | Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire and/or explosion do not breathe fumes. |
| <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 |
|----------------------|---------------|--------------------------|
| CALCIUM PERMANGANATE | Not Available | Not Determined           |

|                               |   |
|-------------------------------|---|
| <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>  | No data is available on the product itself.   |
| <b>Mutagenic effects:</b>     | No data is available on the product itself.   |
| <b>Reproductive toxicity:</b> | No data is available on the product itself.   |

**10. ECOLOGICAL INFORMATION**

|                             |   |
|-----------------------------|---|
| <b>Mobility:</b>            | No data available   |
| <b>Bioaccumulation:</b>     | No data available   |
| <b>Ecotoxicity effects:</b> | No data available   |
| <b>Aquatic toxicity:</b>    | May cause long-term adverse effects in the aquatic environment. |

| Components           | U.S. DOT - Appendix B - Marine Pollutan | U.S. DOT - Appendix B - Severe Marine Pollutants | United Kingdom - The Red List: |
|----------------------|---|--|--------------------------------|
| CALCIUM PERMANGANATE | Not Listed                              | Not Listed                                       | Not Listed                     |

|                      |                   |  |                                 |
|----------------------|-------------------|--|---------------------------------|
| Components           | Germany VCI (WGK) | World Health Organization (WHO) - Drinking Water | Ecotoxicity - Fish Species Data |
| CALCIUM PERMANGANATE | Not Listed        | Not Listed                                       | Not Listed                      |

|                      |                                     |                             |                               |
|----------------------|-------------------------------------|-----------------------------|-------------------------------|
| Components           | Ecotoxicity - Freshwater Algae Data | Ecotoxicity - Microtox Data | Ecotoxicity - Water Flea Data |
| CALCIUM PERMANGANATE | Not Listed                          | Not Listed                  | Not Listed                    |

|                      |                           |   |  |
|----------------------|---------------------------|---|--|
| Components           | EPA - ATSDR Priority List | EPA - HPV Challenge Program Chemical List | California - Priority Toxic Pollutants |
| CALCIUM PERMANGANATE | Not Listed                | Not Listed                                | Not Listed                             |

|                      |  |  |
|----------------------|--|--|
| Components           | California - Priority Toxic Pollutants | California - Priority Toxic Pollutants |
| CALCIUM PERMANGANATE | Not Listed                             | Not Listed                             |

## 11. TRANSPORT INFORMATION

### IMDG/IMO

|  |                                  |
|--|----------------------------------|
| <b>Proper shipping name:</b>           | Permanganates, inorganic, n.o.s. |
| <b>IMDG - Hazard Classifications</b>   | Not Applicable                   |
| <b>IMDG - Marine Pollutants</b>        | Not Applicable                   |
| <b>IMDG - Marine Pollutants</b>        | Not Applicable                   |
| <b>IMDG - Regulated Substances</b>     | Not Applicable                   |
| <b>IMDG - Severe Marine Pollutants</b> | Not Applicable                   |

### IMO-labels:

|                              |                                  |
|------------------------------|----------------------------------|
| <b>Packing group:</b>        | II                               |
| <b>Proper shipping name:</b> | Permanganates, inorganic, n.o.s. |
| <b>UN/Id No:</b>             | 1482                             |

### ADR/RID

|  |  |
|--|--|
| <b>Australia Hazardous Statement:</b>        | Hazardous according to criteria of NOHSC |
| <b>Hazard Class</b>                          | 5.1                                      |
| <b>Item:</b>                                 | CALCIUM PERMANGANATE                     |
| <b>ADR/RID-labels:</b>                       | Oxidizer                                 |
| <b>UN/Id No:</b>                             | 1482                                     |
| <b>Emergency Action Code (Hazchem code):</b> | 1Y                                       |
| <b>Proper shipping name:</b>                 | Permanganates, inorganic, n.o.s.         |

### ICAO:

|                              |                                  |
|------------------------------|----------------------------------|
| <b>Hazard Class</b>          | 5.1                              |
| <b>Packing group:</b>        | II                               |
| <b>Proper shipping name:</b> | Permanganates, inorganic, n.o.s. |

## 12. REGULATORY INFORMATION

### International inventories:

CALCIUM PERMANGANATE  
**Australia (AICS):** Not Present

EU EINECS List - Not Present

**Indication of Danger:**

O - Oxidizing.



**Risk Phrases:** R 9 - Explosive when mixed with combustible material.  
R18 - In use, may form flammable vapour-air mixture.

**Safety Phrases:** S13 - Keep away from food, drink and animal feeding stuffs.  
S27 - Take off immediately all contaminated clothing.  
S16 - Keep away from sources of ignition - No smoking.

**Poisons schedule No. (Aust)/Toxic Substance (NZ):** Not required

### 13. OTHER INFORMATION

**Prepared by:** Health & Safety

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**End of Safety Data Sheet**