

## Safety Data Sheet **CHROMIUM Metal**

SDS no. D2NG13GM • Version 1.0 • Date of issue: 2023-08-27

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### SECTION 1: Identification

#### GHS Product identifier

Product name CHROMIUM Metal

#### Recommended use of the chemical and restrictions on use

Component of stainless steels and high temperature alloys, plating, coatings, inorganic pigments, manufactured metal goods and laboratory reagent.

#### Supplier's details

Name ChemSupply Australia Pty Ltd  
Address 38-50 Bedford Street  
5013 Gillman South Australia  
Australia

Telephone 08 8440 2000  
email [www.chemsupply.com.au](http://www.chemsupply.com.au)

#### Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

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### SECTION 2: Hazard identification

#### General hazard statement

Not classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as non-Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

#### Classification of the substance or mixture

#### GHS classification in accordance with: UN GHS revision 7

Not a hazardous substance or mixture.

#### GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

#### Other hazards which do not result in classification

Not a hazardous substance or mixture.

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### SECTION 3: Composition/information on ingredients

#### Mixtures

Molecular weight: 52

#### Components

Component	CAS no.	Concentration
CHROMIUM (EC no.: 231-157-5; Index no.: 024-007-00-3)	7440-47-3	100 % (weight)
CLASSIFICATIONS: No data available. HAZARDS: No data available.		

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### SECTION 4: First-aid measures

#### Description of necessary first-aid measures

If inhaled	If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.
In case of skin contact	Immediately remove contaminated clothing and wash affected area with water for at least 15 minutes. Ensure contaminated clothing is washed before re-use. Seek medical advice /attention depending on the severity.
In case of eye contact	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. In all cases of eye contamination it is a sensible precaution to seek medical advice.
If swallowed	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek medical advice if effects persist.

#### Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically based on judgement of doctor and individual reactions of the patient.

For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

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### SECTION 5: Fire-fighting measures

#### Suitable extinguishing media

Do not use carbon dioxide, water or foam which may form an explosive mixture with powdered chromium.

#### Specific hazards arising from the chemical

Hazards from Combustion Products: Oxides of chromium.

Specific hazards arising from the chemical: May burn but do not ignite readily. Risk of dust explosion.

#### Special protective actions for fire-fighters

Precautions in connection with Fire: Wear SCBA and structural firefighter's uniform.

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### SECTION 6: Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Avoid substance contact. Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms.  
Avoid dust build up.

Wear protective clothing specified for normal operations (see Section 8)

**Environmental precautions**

Prevent from entering into drains, ditches or rivers.

**Methods and materials for containment and cleaning up**

Sweep up (avoid generating dust) and using clean non-sparking tools transfer to a clean, suitable, clearly labelled container for disposal in accordance with local regulations.

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**SECTION 7: Handling and storage**

**Precautions for safe handling**

Avoid prolonged or repeated contact with skin, eyes and clothing . Avoid ingestion and inhalation of material. Avoid generation or accumulation of dusts. Only use in well-ventilated areas.

**Conditions for safe storage, including any incompatibilities**

Store in a cool, dry place. Store away from oxidizing agents. Keep containers closed at all times. Keep in a well-ventilated place

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**SECTION 8: Exposure controls/personal protection**

**Control parameters**

**CAS: 7440-47-3**

CHROMIUM

AU/SWA (Australia): 0.5 mg/m<sup>3</sup> TWA inhalation

**Appropriate engineering controls**

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn.

**Individual protection measures, such as personal protective equipment (PPE)**

**Eye/face protection**

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

**Skin protection**

Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance.

**Body protection**

Footwear: Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.

Body Protection: Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

**Respiratory protection**

Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

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**SECTION 9: Physical and chemical properties**

**Basic physical and chemical properties**

Physical state	Solid
Appearance	Light grey metal
Color	No data available.
Odor	Odourless.
Odor threshold	No data available.
Melting point/freezing point	1887.5 °C
Boiling point or initial boiling point and boiling range	2657 °C
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	No data available.
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	No data available.
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Insoluble.
Partition coefficient n-octanol/water (log value)	No data available.
Vapor pressure	No data available.
Evaporation rate	No data available.
Density and/or relative density	Specific Gravity: 7.2
Relative vapor density	No data available.
Particle characteristics	No data available.

**Supplemental information regarding physical hazard classes**

No data available.

**Further safety characteristics (supplemental)**

Soluble in acids (except nitric) and strong alkalis.

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**SECTION 10: Stability and reactivity**

**Reactivity**

Stable under normal conditions of storage and handling.

**Chemical stability**

Stable.

**Possibility of hazardous reactions**

A heated mixture of chromium powder and carbon dioxide may be ignitable and explosive. Reacts violently with strong oxidising agents causing fire and explosion hazard.

**Conditions to avoid**

Heat and incompatible materials.

**Incompatible materials**

Strong oxidising agents, acids, fluorine, halogen-halogen compounds, oxides of sulfur and nitrogen, carbon dioxide, alkalis and alkali carbonates.

**Hazardous decomposition products**

No data available.

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**SECTION 11: Toxicological information**

**Information on toxicological effects**

**Acute toxicity**

Ingestion: May be harmful if swallowed. May effect gastrointestinal and urinary system.

Inhalation: May cause irritation to mucous membranes and upper respiratory tract. May cause coughing and fibrosis.

**Skin corrosion/irritation**

May cause skin irritation.

**Serious eye damage/irritation**

May cause irritation, redness, tearing, blinking and mild temporary pain.

**Respiratory or skin sensitization**

No data available.

**Germ cell mutagenicity**

No data available.

**Carcinogenicity**

No data available.

**Reproductive toxicity**

No data available.

**Summary of evaluation of the CMR properties**

No data available.

**Specific target organ toxicity (STOT) - single exposure**

No data available.

**Specific target organ toxicity (STOT) - repeated exposure**

No data available.

**Aspiration hazard**

No data available.

**Additional information**

Chronic Effects: Possible risk of irreversible effects. Prolonged ingestion may cause stomach pains, vomiting, diarrhea, liver damage and

kidney damage. Repeated or prolonged contact with some chromium compounds may cause skin sensitisation. Fibrosis of the lungs may develop to pneumoconiosis.

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CHROMIUM: \*TOXICITY: Not available

\*AQTX/TLM96: Not available

\*SAX TOXICITY EVALUATION:  
THR: High pulmonary toxicity.

\*CARCINOGENICITY:  
Tumorigenic Data:  
TDLo: ivn-rat 2160 ug/kg/6W-I  
TDLo: imp-rat 1200 ug/kg/6W-I  
TDLo: imp-rbt 75 mg/kg  
Review: IARC Cancer Review: Human Inadequate Evidence  
IARC Cancer Review: Animal Inadequate Evidence  
IARC: Not classifiable as a human carcinogen [610]  
Status: EPA Carcinogen Assessment Group [610]  
NTP human carcinogen [610]

\*MUTATION DATA: Not available

\*TERATOGENICITY: Not available

\*STANDARDS, REGULATIONS & RECOMMENDATIONS:  
OSHA: Federal Register (1/19/89) and 29 CFR 1910.1000 Subpart Z  
Transitional Limit: PEL-TWA 1 mg/m3 [610]  
Final Limit: PEL-TWA 1 mg/m3 [610]  
ACGIH: TLV-TWA 0.5 mg/m3 [610]  
NIOSH Criteria Document: Recommended exposure limit to this compound-air:  
PEL-TWA 0.001 mg/m3 [610]  
NFPA Hazard Rating: Health (H): None  
Flammability (F): None  
Reactivity (R): None

\*OTHER TOXICITY DATA: Not available

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## **SECTION 12: Ecological information**

### **Toxicity**

Ecological Information: Due to poor solubility no ecological problems are expected.

### **Persistence and degradability**

No data available.

### **Bioaccumulative potential**

No data available.

### **Mobility in soil**

No data available.

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### Results of PBT and vPvB assessment

No data available.

### Endocrine disrupting properties

No data available.

### Other adverse effects

No data available.

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## SECTION 13: Disposal considerations

### Disposal methods

#### Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

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## SECTION 14: Transport information

### ADG (Road and Rail)

Not dangerous goods

### IMDG

Not dangerous goods

### IATA

Not dangerous goods

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## SECTION 15: Regulatory information

### Safety, health and environmental regulations specific for the product in question

#### Australia SUSMP

Poison Schedule: NS

#### Canadian Domestic Substances List (DSL)

Chemical name: Chromium

CAS: 7440-47-3

#### Massachusetts Right To Know Components

Chemical name: Chromium

CAS number: 7440-47-3

#### New Jersey Right To Know Components

Common name: CHROMIUM

CAS number: 7440-47-3

#### Pennsylvania Right To Know Components

Chemical name: Chromium

CAS number: 7440-47-3

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## **SECTION 16: Other information**

### **Further information/disclaimer**

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

### **Preparation information**

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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia  
National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'  
Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.  
Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.  
Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants, December 2019  
Safe Work Australia, Hazardous Chemical Information System (HCIS), [hcis.safeworkaustralia.gov.au](http://hcis.safeworkaustralia.gov.au)  
IATA, Dangerous Goods Regulations (DGR)  
IMO, International Maritime Dangerous Goods Code (IMDG)