

# Safety Data Sheet



## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** **MASTER ALLOY CHROME ALUMINIUM 80/10**

**Recommended use of the chemical and restrictions on use:** Production of alloys.

**Supplier:** Ixom Operations Pty Ltd (Incorporated in Australia)  
**NZBN:** 9429041465226  
**Street Address:** 166 Totara Street  
Mt Maunganui South  
New Zealand

**Telephone Number:** +64 9 368 2700  
**Facsimile:** +64 9 368 2710  
**Emergency Telephone:** **0 800 734 607 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## 2. HAZARDS IDENTIFICATION

Not classified as a Dangerous Good under NZS 5433:2012 Transport of Dangerous Goods on Land.

Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001.

**SIGNAL WORD:** DANGER

### Subclasses:

Subclass 6.5 Category A - Substances that are respiratory sensitisers.

Subclass 6.8 Category B - Substances that are suspected human reproductive or developmental toxicants.

Metal Industry Products (Subsidiary Hazard) Group Standard 2006

Approval Number: HSR002612



### Hazard Statement(s):

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H361 Suspected of damaging fertility or the unborn child.

### Precautionary Statement(s):

#### Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P281 Use personal protective equipment as required.

P285 In case of inadequate ventilation wear respiratory protection.

#### Response:

P304+P341 IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P308+P313 IF exposed or concerned: Get medical advice/attention.

Product Name: MASTER ALLOY CHROME ALUMINIUM 80/10

Substance No: 000000051986

Issued: 19/02/2015

Version: 1

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**Storage:**

P405 Store locked up.

**Disposal:**

P501 In case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Chromium	7440-47-3	>60%	H334 H361
Aluminium	7429-90-5	to 100%	-

## 4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

**Inhalation:**

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.

**Skin Contact:**

If skin contact occurs, remove contaminated clothing and wash skin with soap and water. If irritation occurs, seek medical advice.

**Eye Contact:**

If in eyes, wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

**Ingestion:**

Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Never give anything by the mouth to an unconscious patient. Seek immediate medical assistance.

**Indication of immediate medical attention and special treatment needed:**

Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:**

Dry agent (dry chemical powder).

**Unsuitable Extinguishing Media:**

Water.

**Specific hazards arising from the substance or mixture:**

Non-flammable. May evolve flammable hydrogen gas on contact with oxidising agents, acids and alkalis. Reacts slowly with water to liberate flammable hydrogen gas. Avoid all ignition sources. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc) must be eliminated both in and near the work area. Do NOT smoke.

**Special protective equipment and precautions for fire-fighters:**

Decomposes on heating emitting toxic fumes, including those of aluminium oxide. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion. Reacts slowly with water to liberate flammable hydrogen gas.

## 6. ACCIDENTAL RELEASE MEASURES

**Emergency procedures/Environmental precautions:**

Clear area of all unprotected personnel. Shut off all possible sources of ignition. Wear protective equipment to prevent skin and eye contact and inhalation of vapours/dusts. If contamination of sewers or waterways has occurred advise local emergency services.

**Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:**

Avoid breathing in dust. Work up wind or increase ventilation. Wear protective equipment to prevent skin and eye contact and breathing in vapours/dust. Sweep up but avoid generating dust and airborne material. Collect and seal in properly labelled containers or drums for disposal.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Avoid skin and eye contact and breathing in dust. Avoid formation and build up of dust.

**Conditions for safe storage, including any incompatibilities:** Store in a cool, dry, well ventilated place. Store away from sources of heat or ignition. Store away from incompatible materials described in Section 10. Protect from moisture. Keep containers closed when not in use - check regularly for spills.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Workplace Exposure Standards:** No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority. However, Workplace Exposure Standard(s) for constituent(s):

Aluminium, as Al Metal dust: WES-TWA 10 mg/m<sup>3</sup>

Chromium metal: WES-TWA 0.5 mg/m<sup>3</sup>

As published by the New Zealand Workplace Health & Safety Authority.

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

**Appropriate engineering controls:**

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

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## Individual protection measures, such as Personal Protective Equipment (PPE):

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES, DUST MASK.



Wear overalls, safety glasses and impervious gloves. Avoid generating and inhaling dusts. If determined by a risk assessment an inhalation risk exists, wear a dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Tablets and Briquettes
<b>Colour:</b>	Dark Grey
<b>Odour:</b>	Odourless
<b>Solubility:</b>	Insoluble in water.
<b>Specific Gravity:</b>	4.2
<b>Relative Vapour Density (air=1):</b>	Not available
<b>Vapour Pressure (20 °C):</b>	Not available
<b>Flash Point (°C):</b>	Not applicable
<b>Flammability Limits (%):</b>	Not available
<b>Autoignition Temperature (°C):</b>	Not available
<b>Melting Point/Range (°C):</b>	655
<b>pH:</b>	Not applicable

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	Reacts violently with water when melted.
<b>Chemical stability:</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	Finely divided powder may be flammable at high temperatures.
<b>Conditions to avoid:</b>	Avoid exposure to moisture. Avoid exposure to air. Avoid dust generation.
<b>Incompatible materials:</b>	Incompatible with strong acids , oxidising agents , bases , phosphorus and halogens .
<b>Hazardous decomposition products:</b>	Oxides of aluminium.

## 11. TOXICOLOGICAL INFORMATION

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No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

- Ingestion:** Swallowing can result in nausea, vomiting, diarrhoea, and gastrointestinal irritation.
- Eye contact:** May be an eye irritant. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.
- Skin contact:** Repeated or prolonged skin contact may lead to irritation.
- Inhalation:** Breathing in dust may result in respiratory irritation. A respiratory sensitiser. Can cause possible allergic reactions, producing asthma-like symptoms. Breathing in fumes from heating may produce symptoms of 'metal fume fever'. This condition is characterised by influenza type symptoms occurring a few hours after exposure and lasting up to 48 hours. Symptoms may include chills, fever, headache, tightness of the chest, coughing, weakness, dryness of nose and mouth, muscular pain, nausea, and vomiting.

**Acute toxicity:** No LD50 data available for the product.

**Chronic effects:** Repeated exposures to high concentrations may cause liver and kidney damage. Suspected of damaging fertility or the unborn child.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Avoid contaminating waterways.

## 13. DISPOSAL CONSIDERATIONS

### **Disposal methods:**

Refer to local government authority for disposal recommendations. Dispose of contents/container in accordance with local/regional/national/international regulations.

## 14. TRANSPORT INFORMATION

### **Road and Rail Transport**

Not classified as a Dangerous Good under NZS 5433:2012 Transport of Dangerous Goods on Land.

### **Marine Transport**

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

### **Air Transport**

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

## 15. REGULATORY INFORMATION

### **Classification:**

Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001.

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**Subclasses:**

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Approval Number: HSR002612

**Hazard Statement(s):**

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H361 Suspected of damaging fertility or the unborn child.

## 16. OTHER INFORMATION

Supplier Material Safety Data Sheet; 10/ 2012.

This safety data sheet has been prepared by Ixom Operations Pty Ltd Toxicology & SDS Services.

**Reason(s) for Issue:**

First Issue Primary SDS

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.