

# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### 1.1 Product identifier

**Product name** ALUMINIUM ATOMISED GRIT  
**Synonyms** ALUMINUM ATOMISED GRIT • ATOMISED GRIT

### 1.2 Uses and uses advised against

**Uses** LABORATORY APPLICATIONS • LABORATORY REAGENT • METAL ALLOYS • METAL WORK • METALLURGY APPLICATIONS • SURFACE COATING

### 1.3 Details of the supplier of the product

**Supplier name** AUSTRALIAN METAL POWDERS SUPPLIES PTY LTD  
**Address** 32 Carrington Road, Guildford, NSW, 2161, AUSTRALIA  
**Telephone** (02) 9681 6155  
**Email** [sales@metalpowers.com.au](mailto:sales@metalpowers.com.au)  
**Website** <http://www.metalpowders.com.au>

### 1.4 Emergency telephone numbers

**Emergency** 13 11 26 (Poisons Information Centre)

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

### 2.2 GHS Label elements

No signal word, pictograms, hazard or precautionary statements have been allocated.

### 2.3 Other hazards

No information provided.

## 3. COMPOSITION/ INFORMATION ON INGREDIENTS

### 3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
ALUMINIUM	7429-90-5	231-072-3	100%

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**Eye** If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

**Inhalation** If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

**Skin** If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

**Ingestion** For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting. Ingestion is considered unlikely due to product form.

**First aid facilities** None allocated.

**4.2 Most important symptoms and effects, both acute and delayed**

See Section 11 for more detailed information on health effects and symptoms.

**4.3 Immediate medical attention and special treatment needed**

Treat symptomatically.

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**5. FIRE FIGHTING MEASURES**

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**5.1 Extinguishing media**

Dry agent, soda ash, sand or lime. Do not use water or foam. Withdraw from area and let fire burn out. Prevent contamination of drains and waterways.

**5.2 Special hazards arising from the substance or mixture**

Non flammable. However, fine aluminium powder may be explosive if dispersed into a dust cloud in air in the presence of an ignition source.

**5.3 Advice for firefighters**

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Fires may re-ignite during extinguishing process. Finely divided dust may form explosive mixtures in air when exposed to heat or ignition source (DO NOT disturb burning dust). Do not disturb burning dust and create dust clouds as oxygen will mix with the hot metal and may cause an explosion.

**5.4 Hazchem code**

None allocated.

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**6. ACCIDENTAL RELEASE MEASURES**

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

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. CAUTION: May evolve flammable gases in contact with water. Eliminate all sources of ignition.

**6.2 Environmental precautions**

Prevent product from entering drains and waterways.

**6.3 Methods of cleaning up**

Eliminate all sources of ignition. Collect and place in dry, clean, pressure vented, metal containers for re-use or disposal. Use spark proof equipment and shovels.

**6.4 Reference to other sections**

See Sections 8 and 13 for exposure controls and disposal.

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**7. HANDLING AND STORAGE**

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**7.1 Precautions for safe handling**

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

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

Store in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use.

**7.3 Specific end uses**

No information provided.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

#### Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Aluminium & compounds	SWA [Proposed]	--	1	--	--
Aluminium (metal dust)	SWA [AUS]	--	10	--	--

**Biological limits** No Biological Limit Value allocated.

### 8.2 Exposure controls

**Engineering controls** Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical explosion proof extraction ventilation is recommended. Maintain dust levels below the recommended exposure standard.

#### PPE

- Eye / Face** Wear dust-proof goggles.
- Hands** Wear PVC or rubber gloves.
- Body** When using large quantities or where heavy contamination is likely, wear coveralls.
- Respiratory** Where an inhalation risk exists, wear a Class P1 (Particulate) respirator. At high dust levels, wear a Powered Air Purifying Respirator (PAPR) with Class P3 (Particulate) filter or a Full-face Class P3 (Particulate) respirator.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	LIGHT GREY POWDER
<b>Odour</b>	SLIGHT ODOUR
<b>Flammability</b>	NON FLAMMABLE
<b>Flash point</b>	NOT RELEVANT
<b>Boiling point</b>	2450°C to 2467°C
<b>Melting point</b>	660°C
<b>Evaporation rate</b>	NOT AVAILABLE
<b>pH</b>	NOT AVAILABLE
<b>Vapour density</b>	NOT AVAILABLE
<b>Specific gravity</b>	2.7
<b>Solubility (water)</b>	INSOLUBLE
<b>Vapour pressure</b>	NOT AVAILABLE
<b>Upper explosion limit</b>	NOT AVAILABLE
<b>Lower explosion limit</b>	NOT AVAILABLE
<b>Partition coefficient</b>	NOT AVAILABLE
<b>Autoignition temperature</b>	NOT AVAILABLE
<b>Decomposition temperature</b>	NOT AVAILABLE
<b>Viscosity</b>	NOT AVAILABLE
<b>Explosive properties</b>	NOT AVAILABLE
<b>Oxidising properties</b>	NOT AVAILABLE
<b>Odour threshold</b>	NOT AVAILABLE

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

**10.2 Chemical stability**

Stable under recommended conditions of storage.

**10.3 Possibility of hazardous reactions**

Polymerization is not expected to occur.

**10.4 Conditions to avoid**

Avoid heat, sparks, open flames and other ignition sources.

**10.5 Incompatible materials**

Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid) and alkalis (e.g. sodium hydroxide).

**10.6 Hazardous decomposition products**

May evolve toxic gases if heated to decomposition.

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**11. TOXICOLOGICAL INFORMATION**

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**11.1 Information on toxicological effects**

<b>Acute toxicity</b>	Based on available data, the classification criteria are not met.
<b>Skin</b>	Contact may result in mechanical irritation, redness and rash.
<b>Eye</b>	Contact may result in mechanical irritation, lacrimation and redness.
<b>Sensitisation</b>	Not classified as causing skin or respiratory sensitisation.
<b>Mutagenicity</b>	Not classified as a mutagen.
<b>Carcinogenicity</b>	Not classified as a carcinogen.
<b>Reproductive</b>	Not classified as a reproductive toxin.
<b>STOT - single exposure</b>	Over exposure may result in mucous membrane irritation of the respiratory tract, with coughing.
<b>STOT - repeated exposure</b>	Not classified as causing organ damage from repeated exposure. Some studies report that repeated exposure to fine aluminium dust may result in asthma-like symptoms, lung fibrosis (restricting lung function) and a link with Alzheimers disease.
<b>Aspiration</b>	Not classified as causing aspiration.

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**12. ECOLOGICAL INFORMATION**

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**12.1 Toxicity**

Not expected to be dangerous to the aquatic environment.

**12.2 Persistence and degradability**

Limited information was available at the time of this review.

**12.3 Bioaccumulative potential**

No information provided.

**12.4 Mobility in soil**

Limited information was available at the time of this review.

**12.5 Other adverse effects**

Aluminium in soil may be present as the metal, the oxide or hydroxide, the 3+ ion, or the 3+ ion as an organic complex. The mobility in soil will be greater at high or low soil pH.

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**13. DISPOSAL CONSIDERATIONS**

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**13.1 Waste treatment methods**

<b>Waste disposal</b>	Recycle where possible. Collect without generating dust. Eliminate all sources of ignition. Place in clean, sealed containers and dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information (if required). CAUTION: May evolve flammable gases upon contact with water.
<b>Legislation</b>	Dispose of in accordance with relevant local legislation.

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**14. TRANSPORT INFORMATION**

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**PRODUCT NAME ALUMINIUM ATOMISED GRIT****NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA**

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
<b>14.1 UN Number</b>	None allocated.	None allocated.	None allocated.
<b>14.2 Proper Shipping Name</b>	None allocated.	None allocated.	None allocated.
<b>14.3 Transport hazard class</b>	None allocated.	None allocated.	None allocated.
<b>14.4 Packing Group</b>	None allocated.	None allocated.	None allocated.

**14.5 Environmental hazards**

Not a Marine Pollutant

**14.6 Special precautions for user**

Hazchem code None allocated.

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**15. REGULATORY INFORMATION**

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**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

<b>Poison schedule</b>	A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
<b>Classifications</b>	Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.
<b>Inventory listings</b>	<b>AUSTRALIA: AICS (Australian Inventory of Chemical Substances)</b> All components are listed on AICS, or are exempt.

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**16. OTHER INFORMATION**

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**Additional information**

**DANGEROUS GOODS CLASSIFICATION:** An independent laboratory has tested all grades of aluminium atomised powder in accordance with the detailed test procedures laid down in the ADG Code. Aluminium atomised powder does NOT meet the criteria for the "dangerous when wet" classification, and accordingly these powders have not been classified as Dangerous Goods. Finely divided metal powder has a protective oxide layer which reduces the materials reactive nature and moisture sensitivity.

**RESPIRATORS:** In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

**PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:**

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

**HEALTH EFFECTS FROM EXPOSURE:**

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

**PRODUCT NAME ALUMINIUM ATOMISED GRIT****Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
GHS	Globally Harmonized System
GTEPG	Group Text Emergency Procedure Guide
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m <sup>3</sup>	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

**Report status**

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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