

Trade name: Aluminium Granules

Current version : 3.0.0, issued: 16.12.2014

Replaced version: 3.0.0, issued: 14.10.2014

Region: GB

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name

Aluminium Granules

Substance name Aluminium massive
REACH registration no. 01-2119529243-45-0084

Identification numbers

CAS no. 7429-90-5
EC no. 231-072-3

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance or mixture

Metallurgy industry (aluminothermic procedure)

1.3 Details of the supplier of the safety data sheet

Address

Timna Copper Mine Ltd
DOAR NA
EILOTT ISRAEL 8880200

Telephone no. 972-8-6374171
Fax no. 972-8-6374174
Email timna@timna.co.il

Information provided by / telephone

972-8-6374171

Advice on Safety Data Sheet

timna@timna.co.il

Only representative according to art. 8 Regulation (EC) 1907/2006

Address

UMCO Umwelt Consult GmbH
Georg-Wilhelm-Strasse 183
21107 Hamburg
GERMANY

Telephone no. +49 (0) 79 02 36-300
Fax no. +49 (0) 79 02 36-357

1.4 Emergency telephone number

For medical advice (in German and English):
+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification information

This product does not meet the classification and labelling criteria given in the Regulation (EC) No 1272/2008 (CLP).

2.2 Label elements

Not relevant

2.3 Other hazards

No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical characterization

Substance name aluminium

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3.2 Mixtures

Not applicable. The product is not a mixture.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

After inhalation

Ensure supply of fresh air.

After skin contact

Wash off immediately with soap and water.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.).

After ingestion

Seek medical advice immediately. Rinse out mouth and give plenty of water to drink. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Product itself is non-combustible; adapt fire extinguishing measures to surrounding areas.

Unsuitable extinguishing media

No data available.

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Fumes of metal oxides

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Avoid dust formation. Keep away sources of ignition.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up mechanically. Send in suitable containers for recovery or disposal. Dusts must be attracted with little of water and collected with care.

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6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Avoid the formation and deposition of dust. Provide good ventilation of working area (local exhaust ventilation, if necessary). If workplace exposure limits are exceeded, respiratory protection approved for this particular job must be worn.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Provide eye wash fountain in work area. Do not inhale dust. Avoid product contact with skin, eyes and clothing

Advice on protection against fire and explosion

Dust can form an explosive mixture with air. Take precautionary measures against static charges. Keep away from sources of heat and ignition.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container dry in a cool, well-ventilated place.

Requirements for storage rooms and vessels

Keep only in the original container.

Advice on storage assembly

Do not store together with oxidizing agents.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	Aluminium massive	7429-90-5	231-072-3
List of approved workplace exposure limits (WELs) / EH40			
Aluminium metal			
inhalable dust			
	TWA	10	mg/m ³

DNEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	Aluminium massive			7429-90-5 231-072-3	
	inhalative	Long term (chronic)	local	3.72	mg/m ³
	inhalative	Long term (chronic)	systemic	3.72	mg/m ³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	Aluminium massive			7429-90-5 231-072-3	
	oral	Long term (chronic)	systemic	7.9	mg/kg/day

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8.2 Exposure controls

Appropriate engineering controls

No data available.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn.
Particle filter P2

Eye / face protection

Tightly fitting safety glasses (EN 166).

Hand protection

In case of intensive contact, wear protective gloves (EN 374). Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Other

Normal chemical work clothing.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form/Colour	
granules	
silver-grey	
Odour	
odourless	
Odour threshold	
No data available	
pH value	
Not applicable	
Boiling point / boiling range	
Value	2450 °C
Melting point / melting range	
Value	660 °C
Decomposition point / decomposition range	
No data available	
Flash point	
Not applicable	
Auto-ignition temperature	
No data available	
Oxidising properties	
No data available	
Explosive properties	
Boundary of explosion is according to the granular size.	

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Flammability (solid, gas)	
No data available	
Lower flammability or explosive limits	
No data available	
Upper flammability or explosive limits	
No data available	
Vapour pressure	
Value	0.0013 hPa
Reference temperature	974 °C
Vapour density	
No data available	
Evaporation rate	
No data available	
Relative density	
No data available	
Density	
Value	2.7 g/ml
Reference temperature	20 °C
Solubility in water	
Remarks	insoluble
Solubility(ies)	
No data available	
Partition coefficient: n-octanol/water	
No data available	
Viscosity	
No data available	

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

No data available.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

None known

10.5 Incompatible materials

Oxidizing agents

10.6 Hazardous decomposition products

No hazardous decomposition products known.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity			
LD50	>	15900	mg/kg
Species	rats (male/female)		
Method	OECD 401		
Source	CSR		

Acute dermal toxicity	
Remarks	No data available.

Acute inhalational toxicity			
LC50		0.888	mg/l
Duration of exposure		4	h
Species	rat (male)		
Method	OECD 403		
Source	CSR		

Skin corrosion/irritation	
Species	rabbit
Method	OECD 404
Source	CSR
Evaluation	non-irritant

Serious eye damage/irritation	
Species	rabbit
Source	CSR
Evaluation	non-irritant

Respiratory or skin sensitisation	
Route of exposure	Skin
Species	guinea pig
Source	CSR
Evaluation	non-sensitizing

Germ cell mutagenicity	
No data available	

Reproduction toxicity	
No data available	

Carcinogenicity	
No data available	

STOT-single exposure	
No data available	

STOT-repeated exposure	
No data available	

Aspiration hazard	
No data available	

Symptoms related to the physical, chemical and toxicological characteristics	
Eye contact may cause mechanical irritation through dust particles.	

Delayed and immediate effects as well as chronic effects from short and long-term exposure	
Inhalation of dusts may irritate the respiratory tract. When handled appropriately adverse health effects are not to be expected.	

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SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)			
LC50	>	218.65	mg/l
Duration of exposure		96	h
Species	Pimephales promelas		
Reference substance	aluminium chloride		
Source	CSR		

Toxicity to fish (chronic)			
No data available			

Toxicity to Daphnia (acute)			
EC10		0.668	mg/l
Duration of exposure		21	d
Species	Daphnia magna		
Method	OECD 211		
Source	CSR		

Toxicity to Daphnia (chronic)			
No data available			

Toxicity to algae (acute)			
EC50		1.35	mg/l
Duration of exposure		72	h
Species	Pseudokirchneriella subcapitata		
Method	OECD 201		
Source	CSR		

Toxicity to algae (chronic)			
No data available			

Bacteria toxicity			
No data available			

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

12.7 Other information

Other information
Do not discharge into the drains or waters and do not store on public depositories.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

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Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG

The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

In accordance with the Reach regulation (EC) 1907/2006, the product does not contain any substances that are considered as subject to listing in annex XIV, inventory of substances requiring authorisation.

REACH candidate list of substances of very high concern (SVHC) for authorisation

In accordance with article 57 and article 59 of the Reach regulation (EC) 1907/2006, this substance is not considered as subject to listing in annex XIV, inventory of substances requiring authorisation ("Authorization list").

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES

The substance is not subject to the provisions of annex XVII (restriction entries) of the Reach regulation (EC) 1907/2006.

Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances

Remarks

Annex I, part 1 + 2: not mentioned. With regard to possibly appropriate decomposition products see Chapter 10.

15.2 Chemical safety assessment

For this substance a chemical safety assessment has been carried out.

SECTION 16: Other information

Sources of key data used to compile the data sheet:

EC Directive 67/548/EC resp. 1999/45/EC as amended in each case.

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

EC safety data sheet



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Department issuing safety data sheet

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This information is based on our present state of knowledge and experience.

The security data sheet describes products with a view to the security requirements.

However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.