Vickers Laboratories Ltd - Safety Data Sheet 3297

(in accordance with regulation (EU) 2015/830 and regulation (EC) 1272/2008)

Revision: 1.2 Revision date: 16 April 2021
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Section 1. Identification

1.1 Product Identifier 3297

Product Name ALUMINIUM METAL POWDER (fine)

CAS Number 7429-90-5
REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

Molecular Formula $Al = 26.981$

1.2 Relevent identified uses of the substance or mixure & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd

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Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Pyrophoric solid, category 1	H250: Catches fire spontaneously if exposed to air.
Contact with water > flam gas, category 2	H261: In contact with water releases flammable gas.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms

Hazard Statements	In contact with water releases flammable gas. Catches fire spontaneously if exposed to air.
Precautionary Statements	Keep away from any possible contact with water, because of violent reaction and possible flash fire. Handle under inert gas. Protect from moisture. Wear protective gloves / protective clothing / eye protection / face protection. Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages. In case of fire: Evacuate area.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Aluminium metal powder, resp	7429-90-5	231-072-3		>99.5%	Pyr. Sol. 1,Water-react. 2

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. If discomfort persists OBTAIN MEDICAL ATTENTION.
Inhalation	Remove from exposure. Keep warm and at rest. If conscious place in a sitting position. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. OBTAIN MEDICAL ATTENTION.
Ingestion	If conscious give plenty of water to drink. Do not induce vomiting. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Dry chemical powder.
Unsuitable Media	Do not allow water to come into direct contact with material.

5.2 Special hazards arising from the substance or mixture

Hazards	May evolve toxic fumes if involved in a fire. Reacts with water to form extremely flammable gas.

5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Use approved personal protective equipment. Avoid breathing dust-wear respiratory protective equipment. Ensure no sources of ignition. Avoid raising dust clouds- explosion risk.

6.2 Environmental precautions

Enviromental	Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage	Shovel/sweep up into container for removal Wash area down with copious amounts of water.
Minor Spillage	Shovel/sweep up into container for removal Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with water, acids or other aqueous solutions.

Ensure Local Exhaust Ventilation maintains dust concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry place protected against moisture and water. Keep well protected from ingress of water and well separated from acids

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)		Short Term 15min period)	
Aluminium metal powder, resp	7429-90-5	>99.5%	-	-	4.0 ppm	-

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

Respiratory Protection	Use L.E.V. or natural ventilation to maintain dust concentrations below exposure limits.
Hand Protection	Wear gloves.
Eye Protection	Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection	Avoid contact with skin.
Special Hazards	No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Silver-grey coarse metallic powder.
Odour	No specific odour.
pH	Not applicable
Boiling Point	2450 °C
Melting Point	660 °C
Flash Point	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable
Explosive Properties	Can form explosive dust clouds.
Oxidising Properties	No.
Vapour Pressure	Not applicable
Relative Density	2.7000
Water Solubility	Reacts violently with water evolving a flammable gas which may explode or catch fire.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions but spontaneously flammable in air above 220C.
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	Avoid contact with water or water vapour.
10.5	Incompatable Materials	Contact with water evolves flammable hydrogen gas. Acids, acid chlorides, alkalies, diethyl ether, halogenated solvents, oxidising agents, copper oxide mercury and its salts, nitrates, nitrites and silver chloride.
10.6	Hazardous Decomposition Products	Decomposes to emit highly irritant fumes.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	The dust is irritating to the eyes. Particles deposited in the eye may cause necrosis of the cornea.
Skin	Presents no significant hazard by skin contact.
LD50 Skin	Not available
Ingestion	Low order of acute toxicity.
LD50 Oral	Not available
Inhalation	Prolonged exposure to dust or fume concentrations above the occupational exposure limits will produce irritation of the eyes and respiratory tract. Inhalation of high concentrations of dust may cause dyspnoea, cough, weakness and aluminosis.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	No information is available.

Section 12. Ecological

12.1	Toxicity	None unusual.
	LC50 Algal	Not available
	LC50 Crustacea	Not available
	LC50 Fish	Not 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 & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Small amounts may be carefully decomposed in a large excess of water.
Contaminated Packaging	Use a licensed waste disposer.

Section 14. Transport Information

14.1	**UN Number**	1396
14.2	**Proper Shipping Name**	Aluminium powder, uncoated
14.3	**Transport classes**	
	UN classification	4.3
	Subsidiary hazard(s)	None
	Transport category	2
	ADR Hazard ID	423
	Tunnel Restriction Code	D/E
14.4	**Packing Group**	II
14.5	**Environment hazards**	See section 12.
14.6	**Special precautions for user**	No special precautions required.
14.7	**Transport in bulk**	Not transported in bulk.

Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for subtance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification	Pyrophoric solid, category 1; Contact with water > flam gas, category 2
Signal word	Danger
Hazard Pictograms	
Hazard Statements	H261, H250 In contact with water releases flammable gas. Catches fire spontaneously if exposed to air.
Precautionary Statements	P223, P231+P232, P280, P335+P334, P370+P380 Keep away from any possible contact with water, because of violent reaction and possible flash fire. Handle under inert gas. Protect from moisture. Wear protective gloves / protective clothing / eye protection / face protection. Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages. In case of fire: Evacuate area.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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