Vickers Laboratories Ltd - Safety Data Sheet 1748

(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 1748

Product Name LITHIUM METAL (in paraffin liquid)

CAS Number 7439-93-2
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 $Li = 6.94$

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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(Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Contact with water > flam gas, category 1	H260: In contact with water releases flammable gases which may ignite spontaneously.
Skin corrosion/irritation, category 1B	H314: Causes severe skin burns and eye damage.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms

Hazard Statements	In contact with water releases flammable gases which may ignite spontaneously. Causes severe skin burns and eye damage.
Precautionary Statements	Keep away from any possible contact with water, because of violent reaction and possible flash fire. 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. Use dry powder for extinction. Store in a dry place. Store in a closed container.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Lithium	7439-93-2	231-102-5		>99.8%	Water-react. 1,Skin Corr. 1B

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 URGENTLY.
Skin	Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. OBTAIN MEDICAL ATTENTION URGENTLY.
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 graphite or appropriate metal fire extinguishing 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. Burns in oxygen, nitrogen and carbon dioxide. Once alight it will remove oxygen from sand, carbon dioxide etc making it difficult to extinguish fires.

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. Ensure no contact with water, acids or other aqueous solutions is possible. Evacuate area immediately. Do not allow other people to enter area.

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
Minor Spillage	Shovel/sweep up into container for removal

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.

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)	
Lithium	7439-93-2	>99.8%	-	-	-	-

Exposure data source(s) No occupational exposure data currently available.

8.2 Exposure controls

Respiratory Protection	Presents no significant inhalation health hazard.
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	Soft silvery-white metal sticks, tarnishing readily on exposure to air.
Odour	No specific odour.
pH	Not applicable
Boiling Point	1336°C
Melting Point	180.5°C
Flash Point	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable
Explosive Properties	No.
Oxidising Properties	No.
Vapour Pressure	Not applicable
Relative Density	0.5340
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 decomposes violently in contact with water.
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	Large lumps or small hot particles, react explosively with water, ice and aqueous mineral acids. Burns/reacts violently or even explosively with material containing oxygen such as carbon dioxide, air, sand, asbestos, acids and oxidisers especially above its melting point (180C). Bromobenzene, halocarbons, mercury, metal chlorides, oxides, nitric acid, viton, and sulphur.
10.6	Hazardous Decomposition Products	Decomposes to emit highly irritant fumes.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Can cause severe burns or blindness on contact with the eyes and fumes from burning material are highly irritating.
Skin	Direct contact with moisture on the skin causes severe thermal and caustic burns.
LD50 Skin	Not available
Ingestion	Ingestion will cause severe mouth burns, and if swallowed extensive damage to the oesophagus.
LD50 Oral	Not available
Inhalation	Fumes from burning material are highly irritating to the upper respiratory tract.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	No information is available.
Mutagenicity	No information is available.
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	Wearing full safety equipment cover material with soda ash and slowly add to butan-1-ol in a large container. Allow to stand for 24 hours then wash to drain with copious amounts of water.
Contaminated Packaging	Use a licensed waste disposer.

Section 14. Transport Information

14.1	**UN Number**	1415
14.2	**Proper Shipping Name**	Lithium
14.3	**Transport classes**	
	UN classification	4.3
	Subsidiary hazard(s)	None
	Transport category	1
	ADR Hazard ID	X423
	Tunnel Restriction Code	B/E
14.4	**Packing Group**	I
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	Contact with water > flam gas, category 1; Skin corrosion/irritation, category 1B
Signal word	Danger
Hazard Pictograms	
Hazard Statements	H260, H314 In contact with water releases flammable gases which may ignite spontaneously. Causes severe skin burns and eye damage.
Precautionary Statements	P223, P232, P280, P335+P334, P378, P402+P404 Keep away from any possible contact with water, because of violent reaction and possible flash fire. 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. Use dry powder for extinction. Store in a dry place. Store in a closed container.

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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