WF Education Group - Safety Data Sheet LI3542

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

Revision: 2.0		Revision date:	20 April 2021
(Replaces revision 1.1 of 16 April 2021)		Date printed:	07 June 2021

Section 1. Identification

1.1 Product Identifier LI3542

Product Name LITHIUM NITRATE ANHYDROUS pure 100g.

CAS Number 7790-69-4

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 $LiNO_3$ =68.95

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 WF Education Group

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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

Oxidising solid, category 3	H272: May intensify fire; oxidizer.
Acute toxicity, category 4 (oral)	H302: Harmful if swallowed.
Serious eye damage/irritation, category 2	H319: Causes serious eye irritation.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Warning

Hazard Pictograms

Hazard Statements May intensify fire; oxidizer. Harmful if swallowed. Causes serious eye irritation.

Precautionary Statements	Keep away from heat / sparks/open flames/hot surfaces - No smoking. Keep / Store away from clothing / combustible materials. Take any precaution to avoid mixing with combustibles… Wear protective gloves / protective clothing / eye protection.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Lithium nitrate	7790-69-4	232-218-9		99%	Ox. Sol. 3,Acute Tox. 4 (O),Eye Irrit. 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. If discomfort persists OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water.
Inhalation	Remove from exposure. If material has reacted with an acid to form, nitrous fumes, Obtain immediate medical attention even if patient is not complaining of discomfort.
Ingestion	If conscious give plenty of water to drink. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. 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	Water spray.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards	May evolve toxic fumes if involved in a fire. Mixtures with combustible materials are flammable. Mixtures with finely divided combustible materials can react explosively.

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	Evacuate area immediately. If contact with acid is possible, use full protective clothing and breathing apparatus. Only re-enter area with full protective clothing and breathing apparatus.

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	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 skin and eyes. Do not breath dust. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains dust concentrations to a minimum.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Store in a suitable area for oxidising agents. Keep well separated from combustible materials.

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 nitrate	7790-69-4	99%	-	-	-	-

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

8.2 Exposure controls

Respiratory Protection	If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.
Hand Protection	Wear gloves.
Eye Protection	Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.
Special Hazards	No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	White crystalline solid.
Odour	No specific odour.
pH	Not applicable
Boiling Point	450 °C (Decomposition)
Melting Point	255 °C
Flash Point	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable
Explosive Properties	No.
Oxidising Properties	A strong oxidising agent.
Vapour Pressure	Not applicable
Relative Density	2.3800
Water Solubility	1020 g/L Very soluble in water.

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
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	Avoid contact with acids or combustible materials.
10.5	Incompatable Materials	Many organic compounds. Combustible materials.
10.6	Hazardous Decomposition Products	Not flammable but will assist a fire, producing irritant and toxic fumes of oxides of nitrogen.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Causes serious eye irritation.
Skin	Contact with the solid or dust will be irritating to the skin.
LD50 Skin	>2000 mg/Kg Rat
Ingestion	Ingestion of toxic quantities causes; vomiting, diarrhoea, apathy, impaired vision, hearing defects, drowsiness and cardiovascular failure.
LD50 Oral	1317 mg/Kg Rat
Inhalation	Same as ingestion.
LD50 Inhalation	>5.93 mg/L air Rat (4 hours)
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

Section 12. Ecological

12.1	Toxicity	Do not allow to enter drinking water supplies, waste water, or soil. The following applies to lithium compounds in general: biological effects: fish: toxic from 100mg/l up; crustaceans: Daphnia toxic from 16 mg/l up; plants: toxic from 0.2 mg/l up. The following applies to nitrates in general: may contribute to the eutrophication of water supplies. Fish: LC50 > 500 mg/l.
	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	Do not dispose of as domestic waste.
Contaminated Packaging	Wash out containers with water.

Section 14. Transport Information

14.1	**UN Number**	2722
14.2	**Proper Shipping Name**	Lithium nitrate
14.3	**Transport classes**	
	UN classification	5.1
	Subsidiary hazard(s)	None
	Transport category	3
	ADR Hazard ID	50
	Tunnel Restriction Code	E
14.4	**Packing Group**	III
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	Oxidising solid, category 3; Acute toxicity, category 4 (oral); Serious eye damage/irritation, category 2
Signal word	Warning
Hazard Pictograms	
Hazard Statements	H272, H302, H319 May intensify fire; oxidizer. Harmful if swallowed. Causes serious eye irritation.
Precautionary Statements	P210, P220, P221, P280 Keep away from heat / sparks/open flames/hot surfaces - No smoking. Keep / Store away from clothing / combustible materials. Take any precaution to avoid mixing with combustibles… Wear protective gloves / protective clothing / eye protection.

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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