



SAFETY DATA SHEET: FIREBLOCK LITHIUM

SECTION 1: Identification

1.1 Material Identification

Fireblock Lithium

1.2 Chemical Identification

Acrylate Polymer (SAP)

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

Extinguishing lithium-ion battery fires

Extinguish A-Class fires

1.4 Details of the supplier of the safety data sheet

Fireblock CC

352 Larsen Drive, Muldersdrift, Gauteng, South Africa, 1746

+27 (0) 11 957 5010

1.5 Emergency telephone number

+27 (0) 11 957 5010 (08.30 – 16.30)

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification according to CPL regulations (EC) NO 1272/2008

Eye irritation – H319

Skin irritation – H315

2.2 Label elements



Signal Word: WARNING

Hazard statement(s)

Eye irritation – H319

Skin irritation – H315

Precautionary statement(s)

P235 + P410 Keep cool. Protect from sunlight

P404 Store in a closed container

P411 Store at temperatures not exceeding 50°C / 122°F

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water

P102 Keep out of reach of children

P280 Wear protective gloves/protective clothing/eye protection

P308 + P313 If exposed or concern: Get medical advice/attention

Information concerning particular hazards for humans and environment

Classified as low-risk hazard to human health

Not classified as hazardous to the environment

SECTION 3: Composition/information on ingredient

3.1 Substance

Not applicable

3.2 Mixture

Name	CAS	EC No.	%	Hazard Statement(s)
Potassium Polyacrylate (C ₃ H ₃ KO ₂) _n	25608-12-2	607-755-0	<1%	
Silicon Dioxide (SiO ₂)	7631-86-9	231-545-4	<1%	
Aluminium Oxide (Al ₂ O ₃)	1344-28-1	215-691-6	<1%	
Iron Oxide (Fe ₂ O ₃)	1309-37-1	215-168-2	<1%	
Magnesium Oxide (MgO)	1309-48-4	215-171-9	<1%	H319 Cause serious eye irritation
Calcium Oxide (CaO)	1305-78-8	215-138-9	<1%	H318 Cause serious eye damage H315 Cause skin irritation and H335 May cause respiratory irritation
Potassium Oxide (K ₂ O)	12136-45-7	235-227-6	<1%	H314 Cause severe skin burns and eye damage
Titanium Dioxide (TiO ₂)	13463-67-7	236-675-5	<1%	
Lithium Oxide (Li ₂ O)	12057-24-8	235-019-5	<1%	
Brilliant Blue	3844-45-9	223-339-8	<1%	
Tartrazine Yellow	1934-21-0	217-699-5	<1%	
Water (H ₂ O)	7732-18-5	231-791-2	98%	

SECTION 4: First aid measures

4.1 Description of First Aid Measures

Inhalation

Remove the individual to fresh air

If exposed or concerned: Get medical advice/attention

Skin

Wash the affected area with soap and water. May cause dry skin. Repeated contact may also cause slight irritation

If irritation persists, seek medical attention

If exposed or concerned: Get medical advice/attention

Eye

Flush with copious amounts of water

Eyelids may become sticky

If exposed or concern: Get medical advice/attention

Ingestion

If swallowed drink large amounts of water

Seek medical attention if significant quantities have been ingested

If exposed or concern: Get medical advice/attention

4.2 Most important symptoms and effects, both acute and delayed

No significant hazard

4.3 Indication of any immediate medical attention and special treatment needed

Seek medical attention if irritation or symptoms persist

SECTION 5: Firefighting measures

5.1 Extinguishing media

Fireblock Lithium is not flammable

5.2 Special hazards arising from the substance or mixture

Explosion Data – Not explosive

Flammability – Not flammable

5.3 Advice for firefighters

This product should be prevented from entering drains and watercourses

The surface will be very slippery

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Steps to be taken if material is spilled or released – Sweep up or flush with water or diluted salt solution CAUTION – the surface becomes very slippery when wet

6.2 Environmental precautions

Do not allow product to enter drains.

6.3 Methods and material for containment and cleaning up

Absorb with inert, absorbent material to contain spill

Transfer to suitable, labelled container for disposal

Clean spillage area thoroughly with water

Do not allow product to enter drains, waterways, or sewers

Dispose of waste according to the applicable local and national regulations

If contamination of sewers or waterways occurs, inform the local water and waste management authorities, in accordance with local regulations

6.4 Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Safe to handle. Material is very slippery. Avoid repeated contact with skin

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry place. Keep the container closed when not in use. Protect from sunlight
Keep out of reach of children

7.3 Specific end use(s)

No additional information is available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

No additional information is available

8.2 Exposure controls

Hand protection

Wear rubber gloves when handling for prolonged periods
If exposed or concerned: Get medical advice/attention

Eye/Face protection

Approved safety goggles, and glasses. Avoid contact with eyes, nose, and mouth
If exposed or concerned: Get medical advice/attention

Body protection

Suitable protective workwear, cotton overalls are recommended.
If exposed or concern: Get medical advice/attention

Other information

Use good housekeeping practices

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State – Water Based Gel

Appearance - Viscous

Colour - Green

Odor - Odorless
Odor threshold - Not available
Boiling Point - 1500 °C
Freezing point - 0 °C
Solubility in water - Miscible
Specific Gravity (H₂O=1) - 1.000 – 1.025 @20 °C
pH value – 6.5 – 7.5
Vapor pressure - No data available
Evaporation rate - No data available
Flash point – Non-flammable product
Flammability - Not flammable
Freezing point - 0 °C

9.2 Other information

No additional information available

SECTION 10: Stability and reactivity

10.1 Reactivity

No additional information available

10.2 Chemical stability

The product is stable at normal handling and storage conditions

Do not mix with other chemicals

10.3 Possibility of hazardous reactions

None known

10.4 Conditions to avoid

Protect from sunlight

Protect from frost

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Not classified as hazardous to human health or the environment

Ingestion

May cause nausea and vomiting

If exposed or concern: Get medical advice/attention

Skin

May cause irritation on prolonged contact

If exposed or concern: Get medical advice/attention

Eye

May cause watering and redness
If exposed or concern: Get medical advice/attention

SECTION 12: Ecological information

12.1 Toxicity

Non-Toxic

12.2 Persistence and degradability

Biodegradable

12.3 Bio accumulative potential

No additional information available

12.4 Mobility in soil

No observed effect levels

12.5 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste Treatment Methods

This product is a non-hazardous waste material suitable for approved solid waste landfills.

Collect spillage with a shovel and broom

Dissolving with salt and to be washed into a sandy area

Dispose of contents/container in accordance with local/regional/national/international regulations.

Do not discharge into drains or watercourses as it may cause a blockage

SECTION 14: Transport information

14.1 UN number

Non-hazardous product / Not regulated

IMDG UN no - Non-hazardous product / Not regulated

14.2 Environmental hazards

IMDG marine pollutant hazards - No

UN number (air transport, IATA) - Non-hazardous product / Not regulated

IATA symbol – Non-Flammable, Non-Toxic gas

14.3 Special precautions for use

No additional information is available

SECTION 15: Regulatory information

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

NATIONAL LEGISLATION: South African Occupational Health and Safety Act, Act 85 of 1993

15.2 Chemical safety assessment

Not classified as hazardous
Keep out of reach of children
Wear suitable gloves and eye protection

SECTION 16: Other information

Other information

No additional information available

SDS history

Created – September 2024

Reference

OSHA, 29 CFR 1910.1200(g)
United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), third revised edition, United Nations, 2009.