



SAFETY DATA SHEET according to Regulation (EU) 2015/830

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

1.1. Material Identification

Fireblock Lithium Gel

1.2 Chemical Family

Acrylate Polymer Sodium Salt (SAP)

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

For extinguishing lithium-ion battery fires.

Uses advised against – N/A

1.4 Details of the supplier of the safety data sheet

Company name

JACTONE PRODUCTS LTD

Address

Springvale Avenue, Bilston, West Midlands WV14 0QL UK

Telephone/Fax number Telephone: +44(0)1902 357777

1.5 Emergency telephone number: +44(0)1902 357777 (08:30-16:30)

Additional information

Manufacturer's information:

352 LARSEN DRIVE, MULDRSDRIFT, MULDRSDRIFT, GAUTENG, 1746
SOUTH AFRICA

Telephone: +27(0)72 952 3892

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to regulation 1272/2008

Gases under Pressure – H280

Eye irritation – H319

Eye damage, skin irritation – H208

Skin burns and eye damage – H315

2.2. label elements

Pictogram(s)



Signal word - WARNING

Hazard statement (s)

H280 Contains gas under pressure; may explode if heated.

H319 – Contains **Magnesium Oxide (MgO)**. Causes serious eye irritation.

H208 – Contains **Calcium Oxide (CaO)**. Causes serious eye damage, causes skin irritation.

H315 – Contains **Potassium Oxide (K2O)**. Causes severe skin burns and eye damage.

Precautionary statement – storage

P410+P403 Protect from sunlight. Store in a well-ventilated place.

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.

Information concerning particular hazards for human and environment

Not classified as hazardous to human health or the environment

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

Yes

Description

Water Based Gel

Ingredients

Name	CAS	EC No.	Proportion	Hazard Statement(s)
Nitrogen (N2) gas propellant	7727-37-9	231-783-9	100%	H280
Potassium Polyacrylate(C ₃ H ₅ KO ₂) _n	25608-12-2	607-755-0	<1%	
Silicon Dioxide (O2Si)	7631-86-9	643-045-7	<1%	
Aluminium Oxide (Al2O3)	90669-62-8	618-619-5	<1%	
Iron Oxide (Fe2O3)	8011-97-0	616-935-8	<1%	
Magnesium Oxide (MgO)	1309-48-4	215-171-9	<1%	H319 Causes serious eye irritation.
Calcium Oxide (CaO)	1305-78-8	215-138-9	<1%	H318 Causes serious eye damage, H315 Causes skin irritation and may cause respiratory irritation
Potassium Oxide (K2O)	12136-45-7	235-227-6	<1%	H314 Causes severe skin burns and eye damage, and H318 Causes serious eye damage.
Titanium Dioxide (TiO2)	13463-67-7	643-044-1	<1%	
Lithium Oxide (LiO)	12057-24-8	235-019-5	<1%	
Erythrosine	16423-68-0	240-474-8	0.0125%	
Tartrazine	1934-21-0	217-699-5		
Brilliant Blue	3844-45-9	223-339-8		
Water (H2O)	7732-18-5	686-299-4	98%	

Information on composition

Article containing liquid and gas propellant.

Liquid: Fireblock Lithium Gel

Additional supplier classification(s):

None

Other information

See Section 16 'Other Information'

SECTION 4: First aid measures**4.1. Description of first aid measures****Inhalation**

Remove individual to fresh air.

Skin

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

If irritation persists, seek medical attention.

Eye

Flush with copious amounts water for at least 15 minutes.

Eye lids may become sticky.

Ingestion

If swallowed drink large amounts of water.

Seek medical attention if significant quantities have been ingested.

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.

Advice to doctor

Treat symptomatically.

First aid facilities

Eyewash and normal washroom facilities.

Other information

For advice in an emergency, contact a Poisons Information Centre or a doctor at once.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide, dry chemical, foam, water, or water mist – suitable for surrounding materials

5.2. Special hazards arising from the substance or mixture.

Contents under pressure - cylinders can explode in a fire.

Explosion Data – Not explosive

Flammability – Not flammable or combustible

Special Procedures – None

Flash-point – Non flammable

Auto Ignition – Not applicable

Hazardous combustion products

Under fire conditions this product may emit toxic and/or irritating fumes and gases.

5.3. Advice for firefighters

Water spray may be used to cool down heat-exposed containers.

This product should be prevented from entering drains and watercourses.

Decomposition temperature

Not available

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

Aqueous solution. Do not allow product to enter drains.

6.3. Methods and material for containment and cleaning up

Aqueous solution. 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

Refer to Section 8 & 13

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 container closed when not in use.

Keep out of reach of children.

Storage temperatures

Store at a temperature between 5 °C to 60 °C.

7.3. Specific end use(s)

No further information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Exposure limit values

Substance	CAS No.	Exposure Duration	Exposure Limit	Units	Notes
Nitrogen (N2) gas	None of components have assigned exposure limits				
Magnesium Oxide (MgO)	1309-48-4		10	mg.m ³	
Calcium Oxide (CaO)	1305-78-8		2	mg.m ³	
Potassium Oxide (K2O)	12136-45-7		-	mg.m ³	

8.2. Exposure controls

Personal Precautions

Hand protection

Wear rubber gloves when handling for prolonged periods

Eye/Face protection

Approved safety goggles, glasses with side shields. Avoid contact with eyes, nose, and mouth

Body protection

Suitable protective workwear, e.g., cotton overalls are recommended.

Other information

Nitrogen In high concentrations may cause asphyxiation. – see 4.1

Environmental exposure controls

For waste disposal, see section 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State – Water based Gel

Appearance - Gas under Pressure: Nitrogen Gas and aqueous solution

Colour - Green

Odour - Odourless

Odour threshold - Not available

Boiling Point - 1500 °C

Freezing point - 0 °C

Solubility in water - Miscible

Specific Gravity (H₂O=1) - 1.00 @20 °C

pH value – 6.5 – 8.5

Vapour pressure - No data available

Evaporation rate - No data available

Flash point – Non-flammable product

Flammability - Not flammable

Freezing point - 0 °C

SECTION 10: Stability and reactivity

10.1. Reactivity

No significant hazard

10.2. Chemical stability

Stable under normal use conditions

Do not mix with any other chemical products

10.3. Possibility of hazardous reactions

None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Not classified as hazardous to human health or the environment.

Inhalation

Wear a mask if working with large scale quantities, as well as for dust/smoke inhalation.

Ingestion

May cause nausea and vomiting.

Skin

May cause irritation on prolonged contact.

Eye

May cause watering and redness.

SECTION 12: Ecological information**12.1. Toxicity**

Non-Toxic

12.2. Persistence and degradability

Biodegradable

12.3. Bio accumulative potential

No observed effect level

Low impact on the environment

12.4. Mobility in soil

No observed effect level.

12.5. Other adverse effects

No data available

Environmental protection

Prevent this material entering waterways, drains and sewers.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Can be disposed as a non-toxic and inactive material

Collect spillage with a shovel and broom, or similar and can be reused

Dissolving with salt and to be washed into sandy area.

Do not discharge into drains or watercourses as there is a risk of blockage

The disposal of the waste material must be done in accordance with applicable local and national regulations.

SECTION 14: Transport information**14.1. UN number** – 1044**14.2. UN proper shipping name** - Portable extinguisher - (Contains Nitrogen gas)**14.3. Transport hazard class(es)** - 2.2**14.4. Packing group** - None Allocated**IMDG UN no** - 1044**IMDG proper shipping name** - Portable extinguisher - (Contains Nitrogen gas)**IMDG hazard class** - 2.2**14.5. Environmental hazards****IMDG marine pollutant** - No**UN number (air transport, IATA)** - 1044**IATA proper shipping name** - Portable extinguisher - (Contains Nitrogen gas)**IATA hazard class** - 2.2**IATA symbol** - Non-Flammable, Non-Toxic Gas**14.6. Special precautions for user** - Not available**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code** - Not available**Other Information** - Hazchem Code: 2T**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

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

Not available

SDS history

Created – Oct 2023

References

Guidance on the compilation of Safety Data Sheets, amended by Regulation (EU) 2015/830.

END OF SDS