



SAFETY DATA SHEET

FIREBAN 1 LIMESTONE
Revision Number 1.01

Revision date 01-Dec-2022
Supersedes Date: 03-Oct-2021

Section 1: Identification: Product identifier and chemical identity

Product identifier

Product Name FIREBAN 1 LIMESTONE

Product Code(s)
30616836
30616836; 30800514; 30840044

Other means of identification

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Sealant

Uses advised against No information available

Details of manufacturer or importer

Supplier
Bostik Australia Pty Ltd
51-71 High Street,
Thomastown Victoria
Australia
Tel: 613 9279-9333
Fax: 613 9279-9342

Manufacturer
Bostik Australia Pty Ltd
51-71 High Street,
Thomastown Victoria
Australia
Tel: 613 9279-9333
Fax: 613 9279-9342

ABN: 79 003 893 838

ABN: 79 003 893 838

E-mail address au-bostik-sds@bostik.com

Emergency telephone number

Emergency telephone number 24-hr Emergency: 1800 033 111

Section 2: Hazard(s) identification

GHS Classification

Acute toxicity - Inhalation (Vapors)	Category 4 - (H332)
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Label elements

Exclamation mark



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Signal word
WARNING

Hazard statements
H332 - Harmful if inhaled
Reacts violently with water

Precautionary Statements - Prevention
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Precautionary Statements - Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing
Call a doctor if you feel unwell

Other hazards which do not result in classification
Causes mild skin irritation.
Harmful to aquatic life with long lasting effects.

Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)
Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Poison Schedule Number 6

Label requirements in accordance with SUSMP
POISON
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Section 3: Composition and information on ingredients, in accordance with Schedule 8

Substance

Not applicable

Mixture

Chemical name	CAS No	Weight-%
Frits, chemicals	65997-18-4	0 - <10
Xylenes (o-, m-, p- isomers)	1330-20-7	0 - <10
2-Propanol, 1-chloro-, phosphate (3:1)	13674-84-5	0 - <10
Benzenesulfonyl isocyanate, 4-methyl-	4083-64-1	< 1%
4,4'-Methylenediphenyl diisocyanate	101-68-8	< 1%
m-tolylidene diisocyanate	26471-62-5	< 1%
Glycidoxypropyltrimethoxysilane	2530-83-8	0 - <10
Non-hazardous ingredients	Proprietary	Balance

Section 4: First aid measures

Emergency telephone number Poisons Information Center, Australia: 13 11 26
Poisons Information Center, New Zealand: 0800 764 766

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation If breathing has stopped, give artificial respiration. Get medical attention immediately.
Remove to fresh air. If symptoms persist, call a physician.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper

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	eyelids. Consult a physician.
Skin contact	Wash skin with soap and water.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing dust/fume/gas/mist/vapors/spray. Use personal protective equipment as required. See section 8 for more information.

Most important symptoms and effects, both acute and delayed

Symptoms	Prolonged contact may cause redness and irritation. Coughing and/ or wheezing. Difficulty in breathing.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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Section 5: Firefighting measures

Suitable Extinguishing Media

Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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Unsuitable extinguishing media	No information available.
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Specific hazards arising from the chemical

Specific hazards arising from the chemical	No information available.
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Hazardous combustion products	Carbon oxides. Carbon dioxide (CO ₂). Hydrogen chloride. Nitrogen oxides (NO _x). Hydrochloric Acid.
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Special protective actions for fire-fighters

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation. Avoid generation of dust. Do not breathe dust. Use personal protective equipment as required.
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Other information	Refer to protective measures listed in Sections 7 and 8.
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For emergency responders	Use personal protection recommended in Section 8.
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Environmental precautions

Environmental precautions	See Section 12 for additional Ecological Information.
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Methods and material for containment and cleaning up

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Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

Precautions to prevent secondary hazards

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: Handling and storage, including how the chemical may be safely used

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid generation of dust. Ensure adequate ventilation. Do not eat, drink or smoke when using this product.

General hygiene considerations Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

Recommended storage temperature Keep at temperatures between 50 and 95 °F / 10 and 35 °C.

This material is a scheduled poison and must be stored, maintained and used in accordance with the relevant regulations

Section 8: Exposure controls and personal protection

Control parameters

Exposure Limits This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product.

Chemical name	Australia
Frits, chemicals 65997-18-4	TWA: 0.05 mg/m ³ TWA: 0.01 mg/m ³ TWA: 0.5 mg/m ³ TWA: 1 mg/m ³ TWA: 5 mg/m ³ STEL: 10 mg/m ³
Xylenes (o-, m-, p- isomers) 1330-20-7	TWA: 80 ppm TWA: 350 mg/m ³ STEL: 150 ppm STEL: 655 mg/m ³
Benzenesulfonyl isocyanate, 4-methyl- 4083-64-1	TWA: 0.02 mg/m ³ STEL: 0.07 mg/m ³
4,4'-Methylenediphenyl diisocyanate 101-68-8	TWA: 0.02 mg/m ³ STEL: 0.07 mg/m ³
m-tolylidene diisocyanate 26471-62-5	TWA: 0.02 mg/m ³ STEL: 0.07 mg/m ³

OEL as published by Safe Work Australia

Biological occupational exposure limits

Appropriate engineering controls

Engineering controls Showers, eyewash stations, and ventilation systems.

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Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin and body protection	Wear suitable protective clothing.
Hand protection	Wear suitable gloves.
Respiratory protection	Wear a respirator conforming to EN 140 with Type A/P2 filter or better. Organic gases and vapors filter conforming to EN 14387.
Environmental exposure controls	No information available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Solid
Appearance	Thixotropic Paste
Color	Gray Green
Odor	Solvent
Odor threshold	No information available

Property	Values	Remarks • Method
pH	.	
pH (as aqueous solution)	No data available	
Melting point / freezing point	No data available	
Initial boiling point and boiling range	No data available	
Flash point	65 °C	
Evaporation rate	No data available	
Flammability	No data available	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	
Relative vapor density	No data available	
Relative density	1.45	
Water solubility	Insoluble in water	
Solubility(ies)	No data available	
Partition coefficient	No data available	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Kinematic viscosity	No data available	
Dynamic viscosity	No data available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other information

Solid content (%)	No information available	
Density	No information available	
VOC content	64 g/L	SCAQMD Method 304-91

Section 10: Stability and reactivity

Reactivity

Reactivity	No information available.
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Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Hazardous polymerization Hazardous polymerization may occur.

Conditions to avoid

Conditions to avoid Excessive heat.

Incompatible materials

Incompatible materials None known based on information supplied.

Hazardous decomposition products

Hazardous decomposition products Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x). Hydrogen cyanide. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Section 11: Toxicological information

Acute toxicity

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. Harmful by inhalation. (based on components).

Eye contact Based on available data, the classification criteria are not met.

Skin contact Specific test data for the substance or mixture is not available. Causes mild skin irritation.

Ingestion Based on available data, the classification criteria are not met.

Symptoms Prolonged contact may cause redness and irritation. Coughing and/ or wheezing.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 10,406.20 mg/kg

ATEmix (dermal) 8,438.40 mg/kg

ATEmix (inhalation-vapor) 16.40 mg/l

ATEmix (inhalation-dust/mist) 9.92 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Frits, chemicals	>2000 mg/kg (Rattus)	> 2000 mg/kg (Rat)	-

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Xylenes (o-, m-, p- isomers)	=3500 mg/kg (Rattus)	> 1700 mg/kg (Oryctolagus cuniculus) > 4350 mg/kg (Oryctolagus cuniculus)	= 11 mg/L (ATE)
2-Propanol, 1-chloro-, phosphate (3:1)	LD50 > 500 - < 2000 mg/kg (male) LD50 = 632 mg/kg (female) [Rat]	LD50 > 2000 mg/kg (Rattus) OECD 402	>5.05 mg/L (Rattus) 4 h
Benzenesulfonyl isocyanate, 4-methyl-	=2234 mg/kg (Rattus)	LD 50 (Rattus) > 2000 mg/kg OECD 402	>640 ppm (Rattus) 1 h
4,4'-Methylenediphenyl diisocyanate	=31600 mg/kg (Rattus) = 9200 mg/kg (Rattus)	LD 50 > 9400 mg/kg (Oryctolagus cuniculus) OECD 402	=1.5 mg/L (Rattus) 4 h
m-tolylidene diisocyanate	=3060 mg/kg (Rattus)	= 10000 mg/kg (Oryctolagus cuniculus)	=0.107 mg/L 4h (Vapour)(Rattus) (OECD 403) =0.48 mg/L 1h (Vapour)(Rattus) (OECD 403)
Glycidoxypropyltrimethoxysilane	=8025 mg/kg (Rattus)	= 4250 mg/kg (Oryctolagus cuniculus)	>5.3 mg/L (Rattus) 4 h

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes mild skin irritation.

Serious eye damage/eye irritation No information available.

Component Information					
4,4'-Methylenediphenyl diisocyanate (101-68-8)					
Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 405: Acute Eye Irritation/Corrosion	Rabbit	Eye	0.1 mL	24 hours	Non-irritant

Glycidoxypropyltrimethoxysilane (2530-83-8)					
Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 405: Acute Eye Irritation/Corrosion	Rabbit	Eye			Eye Damage

Respiratory or skin sensitization No information available.

Component Information			
Xylenes (o-, m-, p- isomers) (1330-20-7)			
Method	Species	Exposure route	Results
OECD Test No. 429: Skin Sensitisation: Local Lymph Node Assay	Mouse	Dermal	No sensitization responses were observed

4,4'-Methylenediphenyl diisocyanate (101-68-8)			
Method	Species	Exposure route	Results
OECD GD 39	Rat	Inhalation	Sensitizing

m-tolylidene diisocyanate (26471-62-5)			
Method	Species	Exposure route	Results
OECD Test No. 429: Skin Sensitisation: Local Lymph Node	Mouse	Dermal	sensitizing

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Assay			
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Glycidoxypropyltrimethoxysilane (2530-83-8)			
Method	Species	Exposure route	Results
OECD Test No. 406: Skin Sensitization	Guinea pig	Dermal	No sensitization responses were observed

Germ cell mutagenicity No information available.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	Australia	European Union	IARC
Frits, chemicals 65997-18-4			Group 1 Group 2A Group 2B
Xylenes (o-, m-, p- isomers) 1330-20-7			Group 3
4,4'-Methylenediphenyl diisocyanate 101-68-8	Carc. 2	Carc. 2	Group 3
m-tolyldiene diisocyanate 26471-62-5	Carc. 2	Carc. 2	Group 2B

Legend

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans Group 2A - Probably Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans Group 3 - Not Classifiable as to Carcinogenicity in Humans

Component Information		
4,4'-Methylenediphenyl diisocyanate (101-68-8)		
Method	Species	Results
OECD Test No. 453: Combined Chronic Toxicity/Carcinogenicity Studies	Rat	Limited evidence of a carcinogenic effect

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT - single exposure Based on available data, the classification criteria are not met.

STOT - repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard No information available.

Section 12: Ecological information

Ecotoxicity

Aquatic ecotoxicity Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Xylenes (o-, m-, p- isomers) 1330-20-7	-	LC50 96 h 2.6 mg/L (Oncorhynchus mykiss) (OECD 203)	EC50 = 0.0084 mg/L 24 h	EC50 48 h = 3.4 mg/L (Daphnia magna)
2-Propanol, 1-chloro-,	EC50 (72 h) = 82 mg/L	LC50 (96 h) = 51 mg/L	-	EC50 (48 h) = 131 mg/L

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phosphate (3:1) 13674-84-5	(Pseudokirchneriella subcapitata) OECD 201	(Pimephales promelas)		(Daphnia magna)
4,4'-Methylenediphenyl diisocyanate 101-68-8	ErC50 (72h) >1640 mg/L Algae (scenedesmus subspicatus) (OECD 201)	>1000 mg/l (Danio rerio)	-	EC50 (24H) >1000 mg/L Daphnia magna
Glycidoxypropyltrimethoxy silane 2530-83-8	EC50 (96hr): 350 mg/l Pseudokirchneriella subcapitata	LC50 (96h) = 55 mg/L (Cyprinus carpio) OECD 203	-	EC50 (48h) =473 mg/L Daphnia magna

Persistence and degradability

Persistence and degradability No information available.

Component Information			
Xylenes (o-, m-, p- isomers) (1330-20-7)			
Method	Exposure time	Value	Results
OECD Test No. 301F: Ready Biodegradability: Manometric Respirometry Test (TG 301 F)	28 days	biodegradation	87.8 % Readily biodegradable

4,4'-Methylenediphenyl diisocyanate (101-68-8)			
Method	Exposure time	Value	Results
OECD Test No. 302C: Inherent Biodegradability: Modified MITI Test (II)	28 days	0% biodegradation	Not readily biodegradable

Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
Xylenes (o-, m-, p- isomers) 1330-20-7	3.15
2-Propanol, 1-chloro-, phosphate (3:1) 13674-84-5	2.68
Benzenesulfonyl isocyanate, 4-methyl- 4083-64-1	0.6
4,4'-Methylenediphenyl diisocyanate 101-68-8	4.51
m-tolylidene diisocyanate 26471-62-5	3.43

Mobility

Mobility in soil No information available.

Mobility No information available.

Other adverse effects

Other adverse effects No information available.

Endocrine Disruptor Information

Section 13: Disposal considerations

Disposal methods

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Waste from residues/unused products Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.

Contaminated packaging Do not reuse empty containers.

Section 14: Transport information

ADG Not regulated

IATA Not regulated

IMDG Not regulated

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No information available

Section 15: Regulatory information

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

National regulations

Australia

See section 8 for national exposure control parameters

Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Poison Schedule Number 6

National pollutant inventory

Subject to reporting requirement

Chemical name	National pollutant inventory
Frits, chemicals 65997-18-4	10 tonne/yr Threshold category 1 2000 tonne/yr Threshold category 2b 60000 MWH Threshold category 2b 20 MW Threshold category 2b
Xylenes (o-, m-, p- isomers) 1330-20-7	10 tonne/yr Threshold category 1 including individual or mixed isomers 20 MW Threshold category 2b total 60000 MWH Threshold category 2b total 1 tonne/h Threshold category 2a total 25 tonne/yr Threshold category 1a total 400 tonne/yr Threshold category 2a total 2000 tonne/yr Threshold category 2b total
4,4'-Methylenediphenyl diisocyanate 101-68-8	10 tonne/yr Threshold category 1 20 MW Threshold category 2b total 60000 MWH Threshold category 2b total 1 tonne/h Threshold category 2a total 25 tonne/yr Threshold category 1a total 400 tonne/yr Threshold category 2a total 2000 tonne/yr Threshold category 2b total
m-tolylidene diisocyanate 26471-62-5	20 MW Threshold category 2b total 60000 MWH Threshold category 2b total 1 tonne/h Threshold category 2a total 25 tonne/yr Threshold category 1a total

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	400 tonne/yr Threshold category 2a total 2000 tonne/yr Threshold category 2b total
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International Inventories

AIIC	Listed
NZIoC	Listed
ENCS	Not Listed
IECSC	Listed
KECL	Not Listed
PICCS	Not Listed

Legend:

- AIIC** - Australian Inventory of Industrial Chemicals
NZIoC - New Zealand Inventory of Chemicals
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

Europe

Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) Regulation (EC 1907/2006)

SVHC: Substances of Very High Concern for Authorization:

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

2015/863/EU - RoHS

This product does not contain Lead, Cadmium, Mercury, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-Ethylhexyl) phthalate (DEHP), Benzyl butyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP) above the regulated limit mentioned in this regulation

Section 16: Any other relevant information

Prepared By Product Safety & Regulatory Affairs

Revision date 01-Dec-2022

Revision Note

***Indicates updated data since last publication.

Key or legend to abbreviations and acronyms used in the safety data sheet

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

Section 11: TOXICOLOGICAL INFORMATION

LD50 (lethal dose)

Section 12: Ecological information

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EC50 (effective concentration)

Disclaimer

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End of Safety Data Sheet