



# Fulton Hogan

## SAFETY DATA SHEET

**SPRAYFLEX**

Infosafe No.: LQ0MS  
ISSUED Date : 11/01/2021  
ISSUED by: Fulton Hogan Industries Pty Ltd

### 1. IDENTIFICATION

**GHS Product Identifier**

SPRAYFLEX

**Company Name**

Fulton Hogan Industries Pty Ltd (ABN 54 000 630 689)

**Address**

25 Groves Avenue McGrath's Hill  
NSW AUSTRALIA

**Telephone/Fax Number**

Tel: (02)45875 111

**Emergency phone number**

1300 519 398 (24h)

**Recommended use of the chemical and restrictions on use**

Construction or maintenance of pavements. This product is normally stored, transported and used at an elevated temperature in a molten state.

**Other Names**

Name	Product Code
SEALING GRADES - S5E TO S35E	
CRUMB RUBBER - S7R TO S55R	
SPRAYFLEX S0.3B	

### 2. HAZARD IDENTIFICATION

**GHS classification of the substance/mixture**

Not classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

**Other Information**

For hot product:

Hazard Statement(s)

H314 Causes severe skin burns and eye damage

Prevention Precautionary Statement(s)

P280 Wear protective clothing, gloves, eye/face protection and suitable respirator.

Response Precautionary Statement(s)

P302 + P334 IF ON SKIN: Immerse in cool water/wrap in wet bandages. COOL AS QUICKLY AS POSSIBLE WITH WATER DO NOT ATTEMPT TO REMOVE BITUMEN FROM SKIN.

Disposal Precautionary Statement(s)

P501 Dispose of container in accordance with regional and national regulations.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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#### Ingredients

Name	CAS	Proportion
Bitumen	8052-42-4	60-100 %
Crumb rubber	Proprietary	<30 %
Extracts, petroleum, residual oil solvent	64742-10-5	<15 %
Styrene, 1,3- butadiene polymer	9003-55-8	<10 %
Ingredients determined not to be hazardous.		Balance

#### Other Information

Contains hydrogen sulphide (CAS # 7783-06-4).

Hydrogen sulphide may be present both in the liquid and the vapour. Composition is complex and varies with the source of the crude oil.

### 4. FIRST-AID MEASURES

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#### Inhalation

If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop and/or persist seek medical attention.

#### Ingestion

Do not induce vomiting. Wash out mouth thoroughly with water. Seek medical attention.

#### Skin

Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention. If molten material adheres to skin, do not attempt to remove. Cool with cold water, wrap loosely with bandage or cloth and immediately seek trained medical attention.

#### Eye contact

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and/or persist seek medical attention. Cool eyes rapidly with cold water after contact with molten material. Do not attempt to remove molten material. Seek immediate medical attention.

#### First Aid Facilities

Eyewash and normal washroom facilities.

#### Advice to Doctor

Treat symptomatically.

#### Other Information

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

### 5. FIRE-FIGHTING MEASURES

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#### Suitable Extinguishing Media

Dry chemical, foam, carbon dioxide, and water fog.

#### Unsuitable Extinguishing Media

Do not use water jet.

#### Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes and gases including oxides of nitrogen, carbon monoxide and carbon dioxide.

#### Specific Hazards Arising From The Chemical

Elevated temperature liquid is combustible.

**Hazchem Code**

2Y

**Decomposition Temperature**

Not available

**Precautions in connection with Fire**

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. In case of fire the product may be violently or explosively reactive. Use water spray to disperse vapours. This product should be prevented from entering drains and watercourses.

## 6. ACCIDENTAL RELEASE MEASURES

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**Emergency Procedures**

Depending upon its temperature, the product may be liquid, semi-solid or solid. This product is transported at high temperature. Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non-combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. 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.

**Clean-up Methods - Small Spillages**

Allow product to cool and solidify. Shovel into a suitable clearly marked container for disposal or reclamation in accordance with local regulations.

**Clean-up Methods - Large Spillages**

Prevent from spreading by making a barrier with sand, earth or other containment material. Treat residues as for small spillage.

## 7. HANDLING AND STORAGE

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**Precautions for Safe Handling**

Avoid inhalation of vapours and mists, and skin or eye contact. Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of mists or vapours in the work atmosphere. Do not use near ignition sources. Do not pressurise, cut, heat or weld containers as they may contain hazardous residues. Maintain high standards of personal hygiene by washing hands prior to eating, drinking, smoking or using toilet facilities.

Avoid contact with molten material.

Vapours can build up in the headspace of tanks. These can cause flammability/explosion hazards, even at temperatures below the normal flash point. Tank headspaces should always be regarded as potentially flammable and care should be taken to avoid static electricity discharge and all ignition sources during filling, sampling etc from storage tanks. Ensure equipment used is properly earthed or bonded. Will present a flammability hazard if heated above the flash point but bulk liquids at normal storage temperatures present a low fire hazard. Product should not be overheated in storage because of the risk of fire.

Do NOT pressurise, cut, heat or weld empty containers as they may contain hazardous residues.

Toxic quantities of hydrogen sulphide (H<sub>2</sub>S) may be present in storage and rundown tanks, marine vessel compartments, sump pits or other confined spaces which contain or have contained this material. When opening valves, hatched or dome covers, stand upwind, keep face as far from the opening as possible and avoid breathing any gases or vapours. When exposure concentrations are unknown, respiratory protection must be used. These devices should not be relied on for life-threatening concentrations. As an indicator of H<sub>2</sub>S concentration, the rotten eggs odour is unreliable because it may be masked by other odours. In addition, H<sub>2</sub>S fatigues the sense of smell rapidly. Therefore DO NOT ATTEMPT RESCUE WITHOUT WEARING APPROVED SUPPLIED-AIR respiratory equipment.

**Conditions for safe storage, including any incompatibilities**

Store in a cool, dry, well-ventilated area away from sources of ignition, foodstuffs, clothing and incompatible materials such as oxidising agents. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations.

For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids.

Do not overheat in storage. Store away from moisture and sources of ignition. Prohibit water contacting hot bitumen because of the danger of boil-over.

Particular care should be taken to ensure that bulk storage tanks are watertight and that any steam heating coils are regularly

checked for leaks.

The storage temperature in bulk storage should not fluctuate above and below 100°C as this increases the risk of water condensation leading to boil-over.

Care must always be exercised when heating bitumen.

Highly toxic hydrogen sulphide gas may be emitted from hot product and accumulate in enclosed spaces or tanks. Extreme care must therefore be taken during venting of tanks and enclosed spaces which have, at any time, contained hot product. Under no circumstances should entry be made into small enclosures without taking full precautions. Confined spaces contaminated with hydrogen sulphide must always be considered as constituting potentially life-threatening environments.

Pyrophoric (self-heating) deposits, which may cause fire or explosion, may be formed in storage. Avoid exposure of tank vapour space to fresh air, and maintain stable storage temperatures. Regular inspection for such deposits will indicate when tank cleaning is necessary.

Transport: Non-hazardous at ambient temperatures. When transported at elevated temperature, must be in accordance with the Australian Dangerous Goods Code for the Transport of Dangerous Goods by Road and Rail.

### **Storage Regulations**

Classified as a Class C2 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS1940 (2017).

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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### **Occupational exposure limit values**

No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Bitumen

TWA: 5 mg/m<sup>3</sup> (fumes)

Oil mist, refined mineral

TWA: 10 mg/m<sup>3</sup>

Hydrogen Sulphide

TWA: 10 ppm, 14 mg/m<sup>3</sup>

STEL: 15 ppm, 21 mg/m

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

Source: Safe Work Australia

### **Biological Limit Values**

No biological limits allocated.

### **Appropriate Engineering Controls**

Provide sufficient ventilation to keep airborne levels below the exposure limits or as low as possible. Where vapours or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, a flameproof exhaust ventilation system is required.

Refer to relevant regulations for further information concerning ventilation requirements.

### **Respiratory Protection**

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.

Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

### **Eye Protection**

Safety glasses with side shields, chemical goggles or full-face shield and balaclava as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations.

Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 (series) - Eye Protectors for Industrial Applications.

**Hand Protection**

Wear gloves of impervious material such as heat-resistant gauntlet gloves. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

**Body Protection**

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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**Form**

Semi Solid

**Appearance**

Liquid

**Colour**

Brown/black

**Odour**

Bitumen/petroleum odour

**Decomposition Temperature**

Not available

**Melting Point**

>90°C

**Boiling Point**

Not available

**Solubility in Water**

Insoluble

**Specific Gravity**

1.03 (15°C)

**pH**

Not applicable

**Vapour Pressure**

Not available

**Vapour Density (Air=1)**

Not available

**Evaporation Rate**

Not available

**Odour Threshold**

Not available

**Viscosity**

Not available

**Partition Coefficient: n-octanol/water**

Not available

**Flash Point**

>240°C

**Flammability**

Combustible

**Auto-Ignition Temperature**

>300°C

**Flammable Limits - Lower**

Not available

### **Flammable Limits - Upper**

Not available

## **10. STABILITY AND REACTIVITY**

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### **Chemical Stability**

Stable under normal conditions of storage and handling. Strong oxidising agents will violently react with this product otherwise.

### **Reactivity and Stability**

Reacts with incompatible materials.

### **Conditions to Avoid**

Heat, open flames and other sources of ignition.

### **Incompatible materials**

Strong oxidizing agents and acids.

### **Hazardous Decomposition Products**

Under fire conditions this product may emit toxic and/or irritating fumes and gases including oxides of nitrogen, carbon monoxide and carbon dioxide. Long term storage at elevated temperatures can generate VOC's, Sulphur compounds, Carbon monoxide and carbon dioxide.

### **Possibility of hazardous reactions**

Reacts with incompatible materials.

## **11. TOXICOLOGICAL INFORMATION**

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### **Toxicology Information**

No toxicity data available for this material.

### **Ingestion**

Ingestion of this product may irritate the gastric tract causing nausea and vomiting.

### **Inhalation**

Inhalation of product vapours may cause irritation of the nose, throat and respiratory system. Overexposure to vapour may result in respiratory tract irritation.

This product can release Hydrogen sulphide (H<sub>2</sub>S). The primary hazard of H<sub>2</sub>S is inhalation overexposure. Odour is an unreliable indicator of concentration as olfactory fatigue occurs rapidly. Inhalation of H<sub>2</sub>S at airborne levels of approximately 50-70 ppm may result in irritation of the eyes and respiratory tract mucosa. Overexposure to higher concentrations may produce signs and symptoms of headache, dizziness, nausea, vomiting, coughing and a sensation of dryness and pain of the nose, throat and chest. An atmosphere containing 1000-2000 ppm H<sub>2</sub>S may be immediately hazardous to life. Prolonged or frequently repeated exposure to H<sub>2</sub>S may result in chronic health effects characterised by local irritation of the eyes, respiratory tract and skin. Small amounts of H<sub>2</sub>S can be absorbed through the skin, but absorption is too slow to result in poisoning. Inhalation of vapours may irritate the throat.

### **Skin**

May be irritating to skin. The symptoms may include redness, itching and swelling. Contact with molten product can cause severe irritation and thermal burns with permanent scarring of tissue. The greatest hazard is the possibility of skin burns as these products are used at temperatures of 180°C to 195°C.

### **Eye**

May be irritating to eyes. The symptoms may include redness, itching and tearing. Contact with molten product can cause severe irritation and thermal burns with permanent scarring of tissue.

### **Respiratory sensitisation**

Not expected to be a respiratory sensitiser.

### **Skin Sensitisation**

Not expected to be a skin sensitiser.

### **Germ cell mutagenicity**

Not considered to be a mutagenic hazard.

### **Carcinogenicity**

Not considered to be a carcinogenic hazard.

Bitumen (occupational exposure to straight-run bitumens and their emissions during road paving) is listed as a Group 2B: Possibly carcinogenic to humans according to International Agency for Research on Cancer (IARC).

Styrene-butadiene copolymers is listed as a Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

**Reproductive Toxicity**

Not considered to be toxic to reproduction.

**STOT-single exposure**

Not expected to cause toxicity to a specific target organ.

**STOT-repeated exposure**

Not expected to cause toxicity to a specific target organ.

**Aspiration Hazard**

Not expected to be an aspiration hazard.

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## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

No ecological data available for this material.

**Persistence and degradability**

Not available

**Mobility**

Before drying, will form a slick on top of water which could be hazardous to birds and fish. Residual bitumen is non-toxic and non-soluble in water.

**Bioaccumulative Potential**

Not available

**Other Adverse Effects**

Not available

**Environmental Protection**

Do not discharge this material into waterways, drains and sewers.

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## 13. DISPOSAL CONSIDERATIONS

**Disposal considerations**

The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations. Wherever possible, re-use, reprocess or recycle any reclaimed material to reduce waste.

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## 14. TRANSPORT INFORMATION

**Transport Information**

Road and Rail Transport (ADG Code):

This material is classified as Dangerous Goods Class 9 Miscellaneous Dangerous Goods

Class 9: Miscellaneous substances Dangerous Goods are incompatible in a placard load with any of the following:

Class 1: Explosives (when the class 9 substance is a fire risk substance) Division 5.1: Oxidising substances (when the class 9 substance is a fire risk substance) and Division 5.2: Organic peroxides (when the class 9 substance is a fire risk substance).

Marine Transport (IMO/IMDG):

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Class/Division: 9

UN No: 3257

Proper Shipping Name: ELEVATED TEMPERATURE LIQUID, N.O.S. (Contains Bitumen)

Packing Group: III

EMS : F-A, S-P

Special Provisions: 232, 274

Air Transport (ICAO/IATA):

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Class/Division: 9

UN No: 3257

Proper Shipping Name: ELEVATED TEMPERATURE LIQUID, N.O.S. (Contains Bitumen)

Packing Group: III

Packaging Instructions (passenger & cargo): Forbidden

Packaging Instructions (cargo only): Forbidden

**U.N. Number**

3257

**UN proper shipping name**

ELEVATED TEMPERATURE LIQUID, N.O.S.(Contains Bitumen)

**Transport hazard class(es)**

9

**Packing Group**

III

**Hazchem Code**

2Y

**IERG Number**

15

**IMDG Marine pollutant**

No

**Transport in Bulk**

Not available

**Special Precautions for User**

Not available

## 15. REGULATORY INFORMATION

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**Regulatory information**

Not classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.

Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

**Poisons Schedule**

Not Scheduled

## 16. OTHER INFORMATION

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**Date of preparation or last revision of SDS**

SDS Reviewed: January 2021

Supersedes: November 2016

**References**

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Workplace exposure standards for airborne contaminants, Safe work Australia.

American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of Classification and Labelling of Chemicals.

Code of Practice: Managing Noise and Preventing Hearing Loss at Work.

## User Codes

User Title Label	User Codes
Task #	1117

## END OF SDS

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